

Chiropody & Podiatry

A Rapid Literature Review on Education, Regulation, Collaboration, Safety, and Economics of Foot Care in Other Jurisdictions

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Prepared by the Planning Unit, Planning, Research and Policy Division, Ministry of Health and Long-Term Care

Please note that this Rapid Literature Review is a summary of information from other sources, not a representation of the policy position or goals of the Ministry of Health and Long-Term Care. If material in the review is to be referenced, please cite the original, primary source, rather than the review itself.

**Health Professions Regulatory
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Ontario
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SUMMARY OF MAIN FINDINGS

Education and Training for Podiatrists and Chiropodists

- Education for podiatrists and chiropodists is available across jurisdictions through programs that award Diplomas of Chiropody (e.g., in Ontario), Bachelor of Podiatry degrees (e.g., in the UK), and Doctor of Podiatric Medicine degrees (e.g., in the US).
- Similar to medical doctors, Doctors of Podiatric Medicine require postgraduate training to gain practice-based knowledge and skills before becoming licensed.
- Chiropodists have a limited scope of practice compared to podiatrists. Temple University in Philadelphia used to offer programs to bridge this educational gap. These programs are no longer available, and no other programs were identified.

Regulation of Podiatrists and Chiropodists

- Regulatory bodies for podiatry and/or chiropody protect various titles including: “podiatrist”, “chiropodist”, “foot specialist”, “foot correctionist”, “foot expert”, “practapedist”, “podiatric surgeon”, “doctor of podiatric medicine”, “podiatric physician”, “doctor of podiatry”, “doctor of podiatric medicine”, “doctor of surgical chiropody”, and “foot doctor”.
- In Canada, the registration and licensure requirements generally include the completion of a podiatry or chiropody program in an accredited institution, completion of a registration examination approved by a regulatory body, and proof of not having been found guilty of any criminal offence or professional misconduct.
- Most US states require a four-year curriculum in a podiatric medical school, a minimum of two years of postgraduate residency training, and the completion of a board examination for board certification. However, three-year residencies are becoming the trend.
- In the UK, to practice as a podiatrist or podiatric surgeon, one must first complete an approved degree program in podiatry and register with the Health and Care Professions Council. Following that, postgraduate training in podiatric surgery over a minimum of two years, but more typically on three-year contracts, must be taken, and two formal examinations must be passed during training. Successful completion of postgraduate training leads to the award of the Fellowship of the College of Podiatry.

Collaboration between Foot Care Providers and Other Health Professionals

- The importance of collaboration between foot care providers and other health professionals including general practitioners, nurses, dietitians, orthopaedic and vascular surgeons, microbiologists, and physiotherapists was highlighted in several jurisdictions.
- Multidisciplinary diabetic foot care teams may reduce the rate of lower extremity amputations and deliver other benefits such as reduced lengths of hospital stay. However, findings were mixed on hospital admissions.

Patient Safety and Risk of Harm Associated with Foot Care

- Limited information was found on patient safety and risk of harm associated with foot care. Two studies identified potential for inappropriate care arising from risk misclassification and anaesthetic toxicity.

Economics of Foot Care

- Limited information was found on the economics of foot care. Two studies in the US and the UK suggested that the provision of podiatry may reduce the cost of foot care.

OBJECTIVES

The requestor's stated objectives were to identify and summarize the literature on the education, regulation, collaboration, safety, and economics of foot care provided by podiatrists and chiropodists in other jurisdictions. Specific information was requested on the following:

- Education and accreditation institutions to bridge the competency gaps between podiatrists and chiropodists.
- Collaboration among podiatrists, chiropodists, and other health professionals in the delivery of foot care;
- Patient safety and risk of harm related to foot care delivered by podiatrists, chiropodists, and other health professionals;
- Economic impacts of delivering foot care by podiatrists, chiropodists, and other health professionals; and
- Diabetic care and senior care related to foot care.

This review builds on a previous review completed by the Planning Unit in August 2014, which presents the scopes of practice and models of foot care in Canada, the US, the UK, Australia, New Zealand, and Denmark (see [A Rapid Literature Review on Scopes of Practice and Models of Foot Care in Other Jurisdictions](#)). The current review is meant to be read in conjunction with that document.

SEARCH METHODS

Individual peer-reviewed articles were identified through the Ontario Ministry of Health and Long-Term Care's computerized library database, PubMed, and Google Scholar. Grey literature was identified through Google and relevant government websites. The search was limited to English sources and therefore may not capture the full extent of initiatives in non-English speaking countries.

The Medical Subject Heading (MeSH) terms "Podiatry", "Chiropody", "Education", "Accreditation", "Certification", "Licensure", "Government Regulation", "Interprofessional Relations", "Patient Safety", "Professional Misconduct", "Costs and Cost Analysis", "Economics", "Diabetes Mellitus", and "Risk, Aged" were used in combination with the following keywords to identify relevant articles and documents for this review: "podiatry", "podiatrist", "chiropody", "chiropodist", "foot care", "bridging program", "competency", "autonomous practice", "collaboration", "interprofessional", "misconduct", "public protection", "risk of harm", "benefit cost", "economic impact", "diabetes", "diabetic", "senior", "aged", and "elderly".

A total of 50 references were identified and cited in this review: Six reviews/overviews/commentaries from peer-reviewed journals, 10 original research papers from peer-reviewed journals, and 34 documents from the grey literature. [Table 12](#) in Appendix B consists of a summary table with details for each of the sources cited in the review. In total, the searching for relevant material and the writing of this review took approximately 16 days to complete by one person.

DESCRIPTION OF THE FINDINGS

1. Limitations of the Literature

Some of the articles from peer-reviewed journals (6/16) identified during the search for this review were narrative reviews (rather than systematic reviews),^a overviews, or commentaries and may have been subject to the author(s)' bias on the article topics. Further, limited information was found on bridging programs for chiropodists, patient safety and risk of harm related to foot care, and the economics of foot care; no information was found on senior care related to foot care.

2. Terminology

In some jurisdictions, the terms “podiatry” and “chiropody” or “podiatrist” and “chiropodist” were reported to have identical meanings (South Carolina Code of Laws, 2013) and be used interchangeably (Hayes & Bussey, 2011). However, according to the Ontario Podiatric Medical Association,^b in Ontario, there are important differences between podiatrists and chiropodists in their education, service provision, and Ontario Health Insurance Plan (OHIP) coverage as follows:

- Podiatrists have postgraduate degrees in podiatric medicine whereas chiropodists have post-secondary diplomas in chiropody;
- Podiatrists may communicate a diagnosis and perform surgery on bones whereas chiropodists may do neither; and
- Podiatrists have OHIP billing privileges whereas chiropodists do not (Ontario Podiatric Medical Association, 2014).

In this review, podiatry and chiropody are distinguished to be consistent with the podiatry and chiropody models found in Ontario.

3. Education and Training for Podiatrists and Chiropodists

3.1. Education for Podiatrists and Chiropodists

Education for podiatrists and chiropodists is available across jurisdictions through programs that award Diplomas of Chiropody (e.g., in Ontario), Bachelor of Podiatry degrees (e.g., in the UK), and Doctor of Podiatric Medicine degrees (e.g., in Quebec and the US) (Canadian Information Centre for International Credentials, 2011). [Table 1](#) in Appendix A lists the institutions in Canada, the US, and the UK that provide podiatry or chiropody programs. The programs are described below.

Diplomas of Chiropody

Ontario was the only jurisdiction identified in this review to offer a program that awards Diplomas of Chiropody. According to a 2013 report on the competencies of current podiatrists and chiropodists of Ontario, generated by Professional Examination Service^c on behalf of the College of

^a For more information on different types of reviews, see [Cochrane Library](#).

^b The [Ontario Podiatric Medical Association](#) serves podiatrists in Ontario by advocating to government and other stakeholders on behalf of the profession.

^c [Professional Examination Service](#) works across professions, industries, and institutions to develop credentialing programs and offer guidance on credentialing developments, emerging trends, and technology.

Chiropractors of Ontario,^d the program was initially offered at George Brown College but taken over by the Michener Institute around 1990. The program also changed from a post-secondary Diploma in Chiropractic program to a post-Bachelor's Graduate Advanced Diploma of Health Sciences (Chiropractic) program in 2007 (Muenzen & Dionne, 2013). The current program:

- Admits applicants with a Bachelor of Science degree from a recognized university or a Bachelor of Arts degree in Kinesiology with one full credit equivalent in human physiology and one full credit equivalent in human anatomy (Michener Institute, 2013).
- Requires a three-year, seven-semester, full-time commitment (Michener Institute, 2013).
- Offers various courses on topics such as soft tissue surgery, high-risk foot care, legislation and management, interprofessional collaboration, and research methodology (Muenzen & Dionne, 2013). [Table 2](#) in Appendix A summarizes the course list for the program.

Bachelor of Podiatry Degrees

Several international jurisdictions offer three-year post-secondary Bachelor's degree programs in podiatry. Some also offer four-year programs (Muenzen & Dionne, 2013). For example:

- In the UK, the Health Care and Professions Council^e accredits 13 universities to offer a three-year program (Muenzen & Dionne, 2013). UK podiatrists graduate with a Bachelor of Science degree in either Podiatry or Podiatric Medicine after three years or with an equivalent Honours degree after four years (Canadian Podiatric Medical Association, n.d.).
- In Australia, podiatry was closely modelled on its British counterpart, with three-year programs introduced in the 1960s and broadly present today. Some four-year programs also exist (e.g., at the Queensland University of Technology) (Muenzen & Dionne, 2013).
- In South Africa, the University of Johannesburg offers a three-year program in podiatry (Muenzen & Dionne, 2013).

[Table 3](#), [Table 4](#), and [Table 5](#) in Appendix A summarize the course lists or program outlines at some institutions in the UK, Australia, and South Africa, respectively.

Doctor of Podiatric Medicine Degrees

Several Canadian and US jurisdictions offer four-year postgraduate programs culminating in the Doctor of Podiatric Medicine (DPM) degree:

- In Canada, the Université du Québec à Trois-Rivières is the only institution that offers a degree in podiatry (Ontario Podiatric Medical Association, 2014). Established in 2004, the program was largely based on the US podiatry programs and was designed to meet the standards of accreditation of the US Council on Podiatric Medical Education (Muenzen & Dionne, 2013; Canadian Podiatric Medical Association, n.d.).^f The program requires a college diploma or an equivalent, along with basic science prerequisite courses, for admission. The program incorporates clinical practice in a variety of settings, including hospitals (Muenzen & Dionne, 2013). [Table 6](#) in Appendix A summarizes the courses for the podiatry program at the Université du Québec à Trois-Rivières in Quebec.

^d The [College of Chiropractors of Ontario](#) regulates podiatrists and chiropractors in Ontario and establishes standards of practice and educational requirements for entry into practice and continuing competence.

^e The [Health Care and Professions Council](#) is a regulatory body that keeps a register of health care professionals, including podiatrists and chiropractors, who meet the standards for training, professional skills, behaviour, and health.

^f The US [Council on Podiatric Medical Education](#) is an accrediting agency for podiatric medical education that derives its authority from the [House of Delegates](#) of the [American Podiatric Medical Association](#).

- In the US, there are nine podiatric medical schools accredited by the Council on Podiatric Medical Education. All nine schools:
 - Require for admission: 1) a minimum of three years or 90 semester hours of undergraduate credit at a university; 2) undergraduate courses in biology, organic chemistry, inorganic chemistry, physics, mathematics, and English; and 3) the completion of the Medical College Admissions Test.
 - Devote the first two years on classroom instruction and laboratory work in the basic medical sciences, such as anatomy, microbiology, biochemistry, pathology, pharmacology, and physiology.
 - Concentrate the final two years on courses in the clinical sciences, providing practical experience on disorders affecting the foot and ankle and their various types of treatment in clinics and accredited hospitals. Clinical courses include diagnosis,^g therapeutics,^h anaesthesia, and surgery.ⁱ Clinical rotations can vary depending on the interest of the student (Alberta Learning Information Service, 2014a; Muenzen & Dionne, 2013; Kim et al., 2012; Canadian Podiatric Medical Association, n.d.).

3.2. Additional Training for Podiatrists

A historical overview of podiatry by a DPM in the US stated that similar to medical doctors, DPMs require postgraduate training to gain practice-based knowledge and skills before becoming licensed (Levy, 2012).

Postgraduate Training

In the US, the UK, and Australia, postgraduate training ranges from one to three years in duration:

- In the US, residency programs in Podiatric Medicine and Surgery consist of two or three years of postgraduate training in inpatient/outpatient medical and surgical management, with an emphasis on patient diagnosis and management (Levrío, 2009) and the lower extremity (Kim et al., 2012).^j
 - The first year is primarily an intern year in internal medicine, anaesthesiology, pathology, radiology, emergency medicine, and general, orthopaedic, and vascular surgery (Kim et al., 2012; American Podiatric Medical Association, n.d.).
 - The second and third years cover more surgery of the foot and ankle including podiatric, orthopaedic, and limb salvage^k services (Kim et al., 2012).
 - The principal difference between the two- and three-year programs is that residents in the three-year program, compared to the two-year program, gain more training in reconstructive rearfoot and ankle surgery and trauma (Levrío, 2009). [Table 7](#) in Appendix A summarizes the training requirements for ankle surgery in New York State.

^g Diagnosis topics include history taking, physical examination, clinical laboratory procedures, and diagnostic radiology (Muenzen & Dionne, 2013).

^h Therapeutics topics include pharmacology, physical medicine, orthotics, and prosthetics (Muenzen & Dionne, 2013).

ⁱ Surgery topics include general, orthopaedic, and vascular surgery (Kim et al., 2012).

^j The [lower extremity](#) may include the hip, thigh, leg, ankle, or foot.

^k [Limb salvage](#) refers to the preservation of a functional foot without the need for a prosthesis.

- There are approximately 211 health care institutions across the US that are approved sponsors of podiatric medical residency programs (American Podiatric Medical Association, n.d.).
- In the UK and Australia, becoming a podiatric surgeon requires postgraduate training, consisting of 1-2 years of clinical practice, and a Master's degree (College of Podiatry, n.d.; Muenzen & Dionne, 2013). The UK also requires up to six years of surgical training, depending on the podiatric surgeon's role (College of Podiatry, n.d.).
 - Clinical practice in the UK provides experience in the non-surgical management of foot and ankle problems in a supervised environment (College of Podiatry, n.d.).
 - The three-year Master's program in the UK focuses on the theory of podiatric surgery and usually entails 1-2 years in general practice (College of Podiatry, n.d.). The Master's program in Australia may be in podiatric surgery, podiatric medicine, medical science, or public health (Muenzen & Dionne, 2013).
 - Surgical training in the UK is clinic-based and required for one year to become a podiatric surgeon (Hayes & Bussey, 2011) or six years to become a consultant podiatric surgeon in the National Health Service who leads podiatric surgery units (College of Podiatry, n.d.).

Fellowship Training

Podiatry continues to evolve as a surgical subspecialty with increasing training requirements and standardization. In addition to postgraduate training, fellowships exist in the US and Australia.

- In the US, after the completion of residency, a fellowship in sports medicine, advanced reconstructive surgery, or limb salvage can be pursued (Kim et al., 2012).
- In Australia, to practice as a podiatric surgeon, candidates must complete a three-year fellowship program with the Australasian College of Podiatric Surgeons.^l
 - The program consists of lectures, case studies, skills development, clinical rotations, peer review activities, progressive development of pre-, peri-, and post-operative skills, mentoring, and research and preparation of publications.
 - The program focuses on knowledge base development, the acquisition and application of perioperative management skills, and attaining competence in all aspects of surgery, including rearfoot and ankle surgery (Muenzen & Dionne, 2013).

3.3. Bridging Programs for Chiropodists

Temple University in Philadelphia designed a "Flexible DPM" program in the early 2000s for Ontario- and British-trained chiropodists to be awarded the DPM degree. The program was meant to bridge the educational gaps identified at the time^m and accommodate chiropodists who were

^l The [Australasian College of Podiatric Surgeons](#) is a national organization whose primary functions include education and training of podiatric surgeons, accreditation of individual podiatric surgeons, and advocacy.

^m Prior to admission to the program, students were to undergo a three-day assessment process addressing 14 course areas. A prepared syllabus, learning objectives, and a suggested reading list were provided for each course. Based on their performance on the examination, students could earn credit for up to seven courses in histology, general anatomy, lower extremity anatomy, neuroscience, biochemistry, physiology, and medical microbiology and immunology. The other seven courses, for which students could not be awarded transfer credits, included

working full-timeⁿ and could be completed in 3-5 years. However, the program was never put into place for two reasons:

- The Michener Institute's program (i.e., Graduate Advanced Diploma of Health Sciences (Chiropractic) in Ontario), which informed the design of Temple University's Flexible DPM program, changed soon after the latter program was to be launched; and
- When Temple University's Flexible DPM program was first offered, no one signed up (Muenzen & Dionne, 2013).

In the mid- to late 2000s, Temple University accepted a number of Michener graduates into its DPM program through an "advanced standing process". Through this process, Michener graduates were awarded transfer credits for Michener courses that were determined to be equivalent to Temple courses and admitted to the third year of the four-year DPM program at Temple University. As of 2013, Temple University was no longer accepting students through this route (Muenzen & Dionne, 2013).

4. Regulation of Podiatrists and Chiropractors

Regulatory bodies for podiatry and chiropractic protect these professions' title, approve educational programs, and register and license professionals under the jurisdictional legislation. [Table 8](#) in Appendix A lists the regulatory bodies for each of the jurisdictions identified in this review.

4.1. Title Protection

Laws in various jurisdictions restrict the use of certain titles for foot care professionals such that only those who are registered and/or licensed by regulatory bodies may practice in their respective jurisdictions. The laws also restrict the use of the term "doctor" within the foot care professions.

Foot Care Professional Titles

Several jurisdictions, including Alberta (Alberta Learning Information Service, 2014b), Manitoba (Manitoba Laws, 2001), Kansas (Kansas Statutes, 2009), South Carolina (South Carolina Code of Laws, 2013), Wisconsin (Wisconsin Statutes, 2014), Wyoming (Wyoming Statutes, n.d.), and the UK (Hayes & Bussey, 2011),^o protect the use of the titles "podiatrist" and/or "chiropractor". Also:

- Manitoba protects variations or abbreviations of the titles "podiatrist" and "chiropractor" (Manitoba Laws, 2001).
- Wisconsin protects the title "foot specialist" (Wisconsin Statutes, 2014), Wyoming protects the titles "foot specialist", "foot correctionist", and "foot expert" (Wyoming Statutes, n.d.), and Kansas protects the titles "foot specialist", "foot correctionist", "foot expert", and "practapodiatrist" (Kansas Statutes, 2009).

pharmacology, pathology, foot and ankle radiology, pathomechanics, physical medicine and rehabilitation, podiatric surgical principles, and operating room principles (Muenzen & Dionne, 2013).

ⁿ The program included weekend courses in Canada and clinical training and placements in the US (Muenzen & Dionne, 2013).

^o This overview of general podiatry by researchers in the UK stated that there is currently no statutory registration or regulation for practitioners in the private foot health sector. Therefore, except for the titles "podiatrist" and "chiropractor", which are protected, there is no legal or formal limitation to foot health practitioners undertaking the role of a podiatrist in the private sector (Hayes & Bussey, 2011).

Use of the Term “Doctor”

Several jurisdictions in Canada and the US have identified the need to qualify the term “doctor” with the foot care specialty to avoid misleading the public as to the limited scope of practice for podiatrists compared to medical doctors (Manitoba Laws, 2001; Rhode Island Department of Health, 2007; Connecticut Statutes, n.d.):

- In Manitoba, podiatrists may use the term “doctor” in connection with the term “podiatrist”, clearly indicating that he or she is not a physician (Manitoba Laws, 2001). Similarly, Alberta protects the titles “podiatric surgeon”, “doctor of podiatric medicine”, and “podiatric physician” for podiatrists (Alberta Learning Information Service, 2014b).
- Connecticut and Rhode Island prohibit the use of the term “doctor” or its synonym without the designation of “podiatrist”, “podiatric medicine”, or “chiroprapist” as to not mislead the public in regards to the profession’s limited scope of practice to treat human ailments (Connecticut Statutes, n.d.; Rhode Island Department of Health, 2007). For a similar reason, Wisconsin protects the titles “doctor of podiatry”, “doctor of podiatric medicine”, “doctor of surgical chiropody”, and “foot doctor” (Wisconsin Statutes, 2014).

4.2. Education Approval

Regulatory bodies approve courses and programs for podiatrists and chiroprapists. For example:

- In the US, the Council on Podiatric Medical Education serves as the accrediting agency for podiatric medicine, evaluating the quality of podiatric programs, postgraduate residencies, certification, and continuing education for DPMs (Muenzen & Dionne, 2013; Levrio, 2009). Certification in podiatric surgery is offered by the American Board of Podiatric Surgeons (Muenzen & Dionne, 2013).
- In the UK, the Health Care and Professions Council accredits universities to offer podiatric programs (Muenzen & Dionne, 2013).
- In Australia, the Podiatrists Registration Board of Victoria approves both undergraduate and postgraduate courses for podiatry in Victoria (Australian Podiatry Association, 2002).

4.3. Registration and Licensing

In Canada, most provinces set their own professional standards as well as registration and licensure requirements for podiatrists and/or chiroprapists through a regulatory body (Canadian Information Centre for International Credentials, 2011). [Table 9](#) in Appendix A summarizes the registration and licensure requirements for Canadian jurisdictions which generally include the following:

- Completion of a podiatry or chiropody program in an accredited institution;
- Completion of a registration examination approved by a regulatory body; and
- Proof of not having been found guilty of any criminal offence or professional misconduct (Alberta Learning Information Service, 2014b; Health Force Ontario, 2014; Muenzen & Dionne, 2013; Saskatchewan Statutes, 2007; Manitoba Laws, 2001).

Notable differences among the Canadian provinces and territories include the following:

- To practice in Ontario, podiatrists must have a postgraduate DPM degree while chiropodists must complete a post-secondary chiropody program (Ontario Podiatric Medical Association, 2014).
- Alberta, British Columbia, and Quebec require a postgraduate DPM degree to practice podiatry. Alberta and British Columbia also require a residency to practice podiatry (Alberta Learning Information Service, 2014a; Muenzen & Dionne, 2013; British Columbia Government, 2012; Canadian Information Centre for International Credentials, 2011).
- In Newfoundland and Labrador, Nova Scotia, Prince Edward Island, the Northwest Territories, Yukon, and Nunavut, there is no legislation regulating the foot care profession(s) (Canadian Information Centre for International Credentials, 2011).

[Table 10](#) in Appendix A summarizes the licensure requirements for US jurisdictions. Most US states require the following for board certification:

- A four-year curriculum in a podiatric medical school;
- A minimum of two years of postgraduate residency training; and
- The completion of a board examination (New York State Education Department, 2014a; Wisconsin Statutes, 2014; Muenzen & Dionne, 2013; South Carolina Code of Laws, 2013; Kansas Statutes, 2009; Rhode Island Department of Health, 2007; Connecticut Statutes, n.d.; Georgia Statutes, n.d.; Wyoming Statutes, n.d.).

However, three-year residencies are becoming the trend (Kim et al., 2012; Levy, 2012), and by 2015, all accredited residencies in the US will be three years in duration, with the states expected to adopt this as a requirement for practice over time (Muenzen & Dionne, 2013).

- Candidates who attend the 24-month Podiatric Medicine and Surgery residency program are eligible only for the Certification in Foot Surgery.
- Candidates who attend the 36-month Podiatric Medicine and Surgery program are eligible for both the Certification in Foot Surgery and the Certification in Reconstructive Rearfoot/Ankle Surgery (Muenzen & Dionne, 2013).
- One must be certified in foot surgery before being eligible for certification in reconstructive rearfoot/ankle surgery.
- The Council on Podiatric Medical Education recognizes two certifying boards – the American Board of Podiatric Surgery and the American Board of Podiatric Orthopaedics and Primary Podiatric Medicine (Levrio, 2009).

In the UK, to practice as a podiatrist or a podiatric surgeon, one must first complete an approved degree program in podiatry and register with the Health and Care Professions Council (College of Podiatry, n.d.). Following that, postgraduate training in podiatric surgery over a minimum of two years, but more typically on three-year contracts, must be taken, and two formal examinations must be passed during training.^p Successful completion of postgraduate training leads to the award of the Fellowship of the College of Podiatry. Having gained a fellowship in podiatric surgery, candidates may complete an additional Certificate of Completion of Podiatric Surgery Training,

^p Initially, postgraduate examinations were offered exclusively by professional bodies. Over the last 20 years, the responsibility has moved from professional bodies to universities and the National Health Service (Maher, 2013).

which is needed for appointment as a consultant podiatric surgeon in the National Health Service who leads podiatric surgery units (Maher, 2013; College of Podiatry, n.d.).

[Table 11](#) in Appendix A summarizes the education and training requirements for the registration and licensing of foot care professionals in various jurisdictions.

4.4. Continuing Education Requirements

Legal documents from several states within the US identified the following requirements for continuing education (CE) for podiatrists:

- New York: 50 hours of CE approved by the New York State Board for Podiatry over a three-year registration period (New York State Education Department, 2014b).
- Rhode Island: An annual minimum of 15 credits of CE as approved by the Board of Examiners in Podiatry (Rhode Island Department of Health, 2007).
- South Carolina: 12 hours of CE annually as approved by the South Carolina Board of Podiatry Examiners (South Carolina Code of Laws, 2013).
- Wisconsin: A minimum of 30 hours of CE over a two-year registration period (Wisconsin Statutes, 2014).

5. Collaboration between Foot Care Providers and Other Health Professionals

5.1. Interprofessional Collaboration

The importance of collaboration between foot care providers and other health professionals was highlighted in a previous Planning Unit literature review which identified GPs, nurses, dietitians, orthopaedic and vascular surgeons, endocrinologists, microbiologists, physiotherapists, pedorthists,^q and orthotists^r as current or potential collaborators to podiatrists (see Section 4.1. Multidisciplinary and Integrated Care and Section 4.2. Diabetes Care in [A Rapid Literature Review on Scopes of Practice and Models of Foot Care in Other Jurisdictions](#)). Further, Family Health Teams and Community Health Centres in Ontario comprise physicians and non-physician health professionals that may include podiatrists and/or chiropodists as well as nurse practitioners and other nurses, pharmacists, dietitians, speech pathologists, audiologists, occupational therapists, and social workers (Conference Board of Canada, 2012).

The Ontario Podiatric Medical Association stated that while the ability of podiatry to bill OHIP constitutes a clear benefit to patients and a competitive advantage to the profession, it also complicates working with other professions to whom patients must pay out of pocket, highlighting a barrier to interprofessional collaboration created by differences in funding models (Ontario Podiatric Medical Association, 2008).

5.2. Effectiveness of Multidisciplinary Diabetic Foot Care Teams

Four studies in the UK and two studies in the US presented evidence that multidisciplinary diabetic foot care teams (MDTs) may reduce the rate of lower extremity amputations. However, care is

^q [Pedorthists](#) are foot orthotic and orthopaedic footwear experts.

^r [Orthotists](#) are professionals specifically trained and educated to design, fabricate, and fit orthoses.

needed in comparing study results as the composition, function, and setting of the teams varied from one study to another (Kerr, 2012):

- A five-year UK study on a diabetic foot care team with a community-based chiropody service^s in a diabetes care centre reported that the major amputation^t rates in people with diabetes fell 76% (from 310.5 to 75.8 per 100,000 people with diabetes) after establishing the foot care team between 1995 and 2000. The minor amputation rates in people with diabetes did not significantly change over the five years (Canavan et al., 2008).^u
- A three-year UK study on a diabetic foot protection team working across primary and secondary care^v reported a 42% increase in minor amputations but a 60% decrease in major amputations carried out over the three years (Bowen et al., 2008).^{w,x}
- A ten-year UK study on a multidisciplinary foot team^y in a large district general hospital reported that the major and minor amputation^z rates in people with diabetes fell 84% (from 41.4 to 6.7 per 10,000 people with diabetes) and 21% (from 11.8 to 9.3 per 10,000 people with diabetes), respectively, between 1995 and 2005 (Krishnan et al., 2008).^{aa}
- According to a UK paper on the health economic evidence relating to foot care in diabetes, unpublished data from an open-access foot care clinic with a MDT^{bb} established in 2006 suggested that the major amputation rate for people with diabetes fell 68% (from 314.7 to 101.5 per 100,000 people with diabetes) between 2006 and 2009 (Kerr, 2012).^{cc}

^s The team included: 1) a diabetologist (i.e., a specialist in diabetes), who developed the team, oversaw diabetic foot care, and co-authored the study; 2) a community diabetic chiropody element; and 3) a vascular and orthopaedic surgeon, an orthotist, diabetic chiropodists, and a diabetologist, all of who helped establish care pathways and protocols for managing diabetic foot problems (Canavan et al., 2008).

^t The authors defined major amputation as any limb loss through or proximal to a point in the foot known as the [tarsometatarsal joint](#) (i.e., the joint between tarsal and metatarsal bones) and minor amputation as any limb loss distal to this joint (Canavan et al., 2008).

^u The authors pointed out that during the study period, there was an increase in the use of angioplasty in people with diabetes and increased use of medication to modify cardiovascular risk. The authors suggested that these interventions possibly contributed to the reduction in amputations (Canavan et al., 2008).

^v In the UK, primary care is local health care provided by general practitioners, walk-in centres, dentists, pharmacists, and optometrists whereas secondary care is received in hospitals ([West Middlesex University Hospital, 2014](#)).

^w The description of this study was available only from the abstract of its paper presented at the 42nd Annual Scientific Meeting of the Vascular Society of Great Britain and Ireland in 2007. No other intervention details were provided in the abstract (Bowen et al., 2008).

^x The authors did not define major and minor amputation (Bowen et al., 2008).

^y There was no mention of which professions constituted the multidisciplinary foot team. However, the authors stated that a diabetes specialist nurse or a podiatrist surveyed all relevant wards twice weekly to identify and follow patients with diabetic foot problems (Krishnan et al., 2008).

^z The authors defined major amputation as a loss of any part of the limb above the ankle (Krishnan et al., 2008).

^{aa} The authors noted that prospective audit and yearly analysis of performance were likely to have contributed to the improvements reported and also that during the study period, there were improvements in vascular, radiological, and microbiological services, as well as in multidisciplinary working (Krishnan et al., 2008).

^{bb} The MDT comprised: 1) weekly input from a diabetologist, two podiatrists, and an orthotist; 2) biweekly input from a vascular surgeon and an orthopaedic surgeon; and 3) support from tissue viability nurses, microbiologists, diabetes liaison nurses, and radiologists as required (Kerr, 2012).

^{cc} The authors did not define major and minor amputation (Kerr et al., 2012).

- A US study on a disease management program^{dd} aimed at preventing lower extremity complications in people with diabetes in a health maintenance organization^{ee} reported that the annual incidence of all amputations fell 52% (from 128.9 to 61.8 per 10,000 people with diabetes) after the implementation of the program, which was a statistically significant finding (Lavery et al., 2005).
- A US study on a multidisciplinary team^{ff} for people with diabetes and a limb-threatening foot infection or ulceration at a Veterans Affairs Medical Center reported that the total amputation rate when comparing a three-year period before and 18 months after implementing the multidisciplinary team fell 40% (from 76 amputations in 118 patients to 45 amputations in 116 patients), which was a statistically significant finding. The amputations were also at more distal sites (i.e., away from the knee towards the toes) after the implementation of the MDT compared to before (Meltzer et al., 2002).

Three studies reported improvements in hospital admission, hospital length of stay (LOS), and foot care management following the introduction of MDTs:

- The three-year UK study on a diabetic foot protection team working across primary and secondary care sectors reported a reduced median hospital LOS (from 47 to 19 days), an increase in patients treated (7% yearly), and increased hospital admissions (from 118 to 174 patients yearly) over the three years (Bowen et al., 2008).
- The US study on a disease management program aimed at preventing lower extremity complications in people with diabetes reported a 22% decrease in the average hospital LOS (from 4.75 to 3.72 days) and a 38% decrease in the number of foot-related hospital admissions (from 22.9 to 14.2 per 1,000 patients yearly) after the implementation of the program (Lavery et al., 2005).
- A US study on a pilot community-based foot care screening program that used a team approach for people with diabetes^{gg} found that after participating in the program, 33% of the study participants purchased the appropriate footwear to manage any foot problems. The authors suggested that the team approach helped the patients understand how proper shoe wear may alleviate or prevent foot problems (Hendricks & Hendricks, 2001).

^{dd} The program included: 1) a staff podiatrist and a nurse screening people with diabetes for known risk factors for lower extremity complications; 2) stratifying patients based on their risk of diabetic foot complications; 3) providing patients with either preventive or acute care based on specific risk-based protocols (low-risk patients were re-screened annually while high-risk patients were scheduled for regular podiatry evaluation at least four times a year); and 4) evaluating patients for therapeutic shoes and insoles by a certified pedorthist (Lavery et al., 2005).

^{ee} In the US, a health maintenance organization (HMO) is a type of health insurance plan. Usually, the care recipients can only go to health care providers who work for or are under contract with the HMO, except in an emergency. HMOs often provide integrated care and focus on prevention and wellness ([Healthcare.gov, n.d.](#); [Medicare.gov, n.d.](#)).

^{ff} This team included a podiatric physician, plastic surgeons and residents, a physician's assistant, vascular surgeons, an orthotist, wound research nurses, a nurse case manager, clinic nurses, social workers, and nutritionists (Meltzer et al., 2002).

^{gg} The foot care screening program was delivered by a team of a certified diabetes educator, who provided foot care education, and a certified pedorthist, who examined the patients' feet and shoes. Foot care education included instruction in self-inspection, skin care, and footwear selection. The examination included the evaluation of foot deformities and pressure areas, gait deviations and associated foot problems, and the fit and appropriateness of footwear (Hendricks & Hendricks, 2001).

Two studies provided evidence on the effectiveness of a podiatrist, as a member of a MDT, in improving health:

- A UK study that assessed the economic impact of a temporary (i.e., seven-month) and partial loss of a non-operative specialist podiatry team^{hh} in a diabetic foot clinic reported increases in the number of hospital admissions and LOS (327 extra bed days during the staff shortage compared to the 12 months prior to service disruption). The authors suggested that specialist podiatrists may reduce unnecessary hospital utilization by providing diabetic foot care in an outpatient setting (Gooday et al., 2013).
- A six-year US study on the provision of care by various professions, including podiatrists and clinician specialists,ⁱⁱ for people with diabetes-related lower extremity complications found that the patients visiting both a podiatrist and a clinician specialist within a year before developing complications were 19%-64% statistically significantly less likely to undergo amputations compared to those who did not visit the two professionals.^{jj} However, those visiting only a podiatrist were not significantly different from those visiting only other health professionals in undergoing amputations (Sloan et al., 2010).^{kk}

6. Patient Safety and Risk of Harm Associated with Foot Care

Limited information was found on patient safety and risk of harm associated with foot care delivered by podiatrists, chiropodists, and other health professionals. Two studies identified potential for risk misclassification and anaesthetic toxicity.

6.1. Risk Misclassification

The importance of classifying people with diabetes based on their risk of foot diseases, so that foot care can be provided by an appropriate health care professional at a frequency appropriate to the patients' needs, was highlighted in a previous Planning Unit literature review (see Section 4.2. Diabetes Care in [A Rapid Literature Review on Scopes of Practice and Models of Foot Care in Other Jurisdictions](#)).

Reasoning that such risk classification must have high sensitivity, specificity, reliability, and replicability regardless of who applies it, a UK study evaluated variations in the assessment of the foot health status in three patients with diabetes among 17 podiatric clinicians. Although the podiatric clinicians used a standardized assessment form and risk classification system, considerable variation was observed in assessing the three patients' foot conditions and allocating them to different risk categories, implying that the same patient would have received different care pathways to manage his or her foot health. The authors

^{hh} The original non-operative podiatry team consisted of 3.89 whole-time equivalent (WTE) podiatrists. In the seven-months, podiatry staffing was reduced to 1.89 WTE and partially replaced by a temporary non-specialist podiatrist. Specialist podiatrists were defined as podiatrists involved in a MDT tertiary foot clinic for the management of the diabetic foot and its related complications (Gooday et al., 2013).

ⁱⁱ Clinician specialists included general surgeons, orthopaedic surgeons, diagnostic radiologists, and, depending on the diabetes severity stage, dermatologists, neurologists, physical medicine and rehabilitation specialists, physical therapists, infectious disease specialists, and plastic and reconstructive surgeons (Sloan et al., 2010).

^{jj} Other health professionals included general/family practitioners, internists, endocrinologists, nurse practitioners, and physician assistants (Sloan et al., 2010).

^{kk} The study used national longitudinal Medicare claims data (Sloan et al., 2010).

recommended more attention be placed on training for clinical testing at both the pre- and post-graduate levels (Thompson et al., 2005).

6.2. Anaesthetic Toxicity

A 2008 review on local anaesthetic toxicity in the UK highlighted that in contrast to the field of medicine, where an anaesthetist is usually expected to administer local anaesthetics and manage any medical complications arising from them, in podiatry, local anaesthetics are routinely administered by the podiatrist providing the treatment. While the authors were unaware of any reports of local anaesthetic toxicity in the podiatry literature, they noted that podiatrists must be trained and able to assess and manage the potential complications of local anaesthesia that range from allergic reactions to acute toxicity (Maher et al., 2008).^{ll}

7. Economics of Foot Care

Limited information was found on the economics of foot care, which included the following two studies:

- A UK study that assessed the economic impact of a temporary (i.e., seven-month) and partial loss of a non-operative specialist podiatry team^{mmm} in a diabetic foot clinic reported that, during the time that the number of specialist non-operative podiatry staff was depleted and for up to six months after the clinic returned to normal activities, the extra costs to the health care system increased by £89,925 (CAD \$143,140).ⁿⁿ This cost increase was attributed to an increase in hospital admissions and LOS, which equated to an extra 327 bed days compared to the 12 months prior to service disruption (Gooday et al., 2013).

^{ll} Toxicity may be a consequence of excessive dosage, pathological states such as liver failure, or, more commonly, a direct result of accidental intravascular injection (Maher et al., 2008).

^{mmm} The original non-operative podiatry team consisted of 3.89 whole-time equivalent (WTE) podiatrists. In the seven-months, podiatry staffing was reduced to 1.89 WTE and partially replaced by a temporary non-specialist podiatrist. Specialist podiatrists were defined as podiatrists involved in a MDT tertiary foot clinic for the management of the diabetic foot and its related complications (Gooday et al., 2013).

ⁿⁿ The Canadian Dollar (CAD) amount was calculated using the average exchange rate for 2010 (£1 = 1.5918 CAD) ([Bank of Canada, 2010](#)).

^{oo} Total health care costs were measured from medical (i.e., inpatient, outpatient, and emergency department) and outpatient pharmacy claims, including those made by the employer and by the patient (for patients who had commercial insurance) as well as those made by Medicare, by the employer, and by the patient (for patients enrolled in Medicare) (Carls et al., 2011).

^{pp} Those on commercial insurance were aged younger than 65 years whereas those on Medicare were aged 65 years or older (Carls et al., 2011). Therefore, health care costs should not be compared between the two insurance cohorts.

- A US study on lower-extremity medical care by a podiatric physician in the treatment of diabetic foot ulcers reported lower health care costs^{oo} in patients who received care from a podiatric physician before the onset of an ulcer, compared to patients who did not receive such care, whether the patients had commercial insurance (lower by USD \$13,474 (CAD \$13,327)) or Medicare coverage (lower by USD \$3,624 (CAD \$3,584)). The authors used a large national claims database to examine total health care costs in the year before the onset of a diabetic foot ulcer and the two years after the onset of the ulcer (Carls et al., 2011).^{pp,qq}

^{qq} The Canadian Dollar (CAD) amount was calculated using the average exchange rate for 2011 (1 US Dollar (USD) = 0.9891 CAD) ([Bank of Canada, 2011](#)).

APPENDIX A

Table 1. Institutions with Podiatry or Chiropody Programs in Canada, the US, and the UK

Jurisdiction	Program	Institution
Canada	Graduate Advanced Diploma of Health Sciences (Chiropody)	<ul style="list-style-type: none"> Michener Institute in Ontario
	Doctor of Podiatric Medicine degree	<ul style="list-style-type: none"> Université du Québec à Trois-Rivières in Quebec
US	Doctor of Podiatric Medicine degree	<ul style="list-style-type: none"> Barry University School of Podiatric Medicine in Florida California School of Podiatric Medicine at Samuel Merritt University in California College of Podiatric Medicine and Surgery at Des Moines University in Iowa College of Podiatric Medicine at Western University of Health Sciences in California Dr. William M. Scholl College of Podiatric Medicine at Rosalind Franklin University of Medicine and Science in Illinois New York College of Podiatric Medicine in New York Ohio College of Podiatric Medicine in Ohio Podiatric Medicine Program at Midwestern University in Arizona Temple University School of Podiatric Medicine in Pennsylvania
UK	Bachelor of Science or Honours Bachelor of Science degrees in Podiatry or Podiatric Medicine	<ul style="list-style-type: none"> Glasgow Caledonian University in Glasgow Matthew Boulton College of Further and Higher Education in Birmingham New College Durham in Durham Queen Margaret University College in Edinburgh University of Brighton in Eastbourne University of East London in London University of Huddersfield in Huddersfield University of Northampton in Northampton University of Plymouth in Plymouth University of Salford in Salford University of Southampton in Southampton University of Ulster in County Antrim University of Wales Institute Cardiff, Wales Centre for Podiatric studies in Cardiff

The table lists the two institutions in Canada (Muenzen & Dionne, 2013; Canadian Podiatric Medical Association, n.d.), nine in the US (Alberta Learning Information Service, 2014a), and 13 in the UK (Canadian Podiatric Medical Association, n.d.) that provide podiatry or chiropody programs.

Table 2. Course List for the Graduate Advanced Diploma of Health Sciences (Chiroprody) at the Michener Institute in Ontario

Semester	Course
Semester 1	<ul style="list-style-type: none"> • Foundations of Interprofessional Collaboration I • Structure and Function of the Lower Limb • Lower Extremity Anatomy Dissection • Pathophysiology • Podiatric Medicine I • Dermatology
Semester 2	<ul style="list-style-type: none"> • Foundations of Interprofessional Collaboration II • Podiatric Biomechanics I • Pathophysiology II • Clinical Pharmacology • Podiatric Medicine II • Podiatric Practice I
Semester 3	<ul style="list-style-type: none"> • Research • Laboratory Diagnosis and Imaging • Podiatric Biomechanics II • Podiatric Anaesthesia and Injections • Podiatric Medicine III • Podiatric Clinical Practice II
Semester 4	<ul style="list-style-type: none"> • Interprofessional Collaborative Clinical Simulation • Management of the High-Risk Foot • Podopediatrics • Podiatric Sports Medicine • Podiatric Soft Tissue Surgery • Podiatric Clinical Practice III
Semester 5	<ul style="list-style-type: none"> • Leadership in Health Care • Evidence Based Medicine Care • Podiatric Clinical Practice IV • Legislation and Practice Management
Semester 6	<ul style="list-style-type: none"> • Podiatric Clinical Placements (Clinical Practice V)
Semester 7	<ul style="list-style-type: none"> • Podiatric Clinical Externships • Research Project

The table summarizes the course list for the Graduate Advanced Diploma of Health Sciences (Chiroprody) program at the Michener Institute in Ontario (Muenzen & Dionne, 2013).

Table 3. Outline of the Podiatry Program at the University of Salford in the UK

Year	Course
Year 1	<ul style="list-style-type: none"> • Concepts in Health Care • Integrated Life Science • Introduction to Professional Practice • Professional Studies and Practice
Year 2	<ul style="list-style-type: none"> • Professional Studies Practice (two classes) • Human Gait Studies • Foundation Medicine • Gait and Locomotion Therapies (two classes) • Prescription only Medicine • Local Analgesia
Year 3	<ul style="list-style-type: none"> • Diagnosis and Management (two classes) • Management and Leadership in Clinical Practice (two classes) • Clinical Practice • Methods of Enquiry

The table outlines the courses for the podiatry program at the University of Salford in the UK (Muenzen & Dionne, 2013).

Table 4. Sample Course List for the Podiatry Program at Queensland University of Technology in Australia

Year, Semester	Course
Year 1, Semester 1	<ul style="list-style-type: none"> • Anatomy • Chemistry for Health and Medical Science • Contemporary Public Health • Interpersonal Processes and Skills
Year 1, Semester 2	<ul style="list-style-type: none"> • Biomechanics • Advanced Anatomy • Biomolecular Science • Human Physiology
Year 2, Semester 1	<ul style="list-style-type: none"> • Podiatric Clinical Gait Analysis • Disease Processes • Epidemiology • Podiatric Medicine I
Year 2, Semester 2	<ul style="list-style-type: none"> • Pharmacology for Health Professionals • Microbiology • Rehabilitation Medicine and Physical Therapies • Podiatric Medicine II
Year 3, Semester 1	<ul style="list-style-type: none"> • Pharmacotherapeutics for Podiatrists • Radiographic Image Interpretation • Medicine • Podiatric Medicine III
Year 3, Semester 2	<ul style="list-style-type: none"> • Podiatric Anaesthesiology • Clinical Therapeutics for Podiatrists • Orthopaedics and Sports Medicine • Podiatric Medicine IV
Year 4, Semester 1	<ul style="list-style-type: none"> • Professional Placement I • Podiatric Medicine V • Podiatric Surgery
Year 4, Semester 2	<ul style="list-style-type: none"> • Transition to the Clinical Profession • Professional Placement II • Podiatric Medicine VI

The table summarizes sample courses for the podiatry program at the Queensland University of Technology in Australia (Muenzen & Dionne, 2013).

Table 5. Outline of the Podiatry Program at the University of Johannesburg in South Africa

Year	Course
Year 1	<ul style="list-style-type: none"> • Podiatric Medicine I (podiatry and microbiology) • Social Studies (psychology, sociology, and communication) • Anatomy and Physiology • Chemistry
Year 2	<ul style="list-style-type: none"> • Podiatric Medicine II (pathology, medicine, and podiatry) • Podiatric Anatomy II • Physiology II • Clinical Studies II
Year 3	<ul style="list-style-type: none"> • Podiatric Medicine III (podopaediatrics, podogeriatrics, and sports medicine) • Clinical Studies III (theory and practical) • Research Project • Health Management Systems

The table outlines the courses for the podiatry program at the University of Johannesburg in South Africa (Muenzen & Dionne, 2013).

Table 6. Course List at the Université du Québec à Trois-Rivières in Quebec

Year, Semester	Course
Year 1, Autumn Semester	<ul style="list-style-type: none"> • Human Anatomy • Clinical Biochemistry I • Histology: General Morphology • Podiatry I • Introduction to Orthopaedics • Podiatric Clinical Observation Rotation • Human Physiology I
Year 1, Winter Semester	<ul style="list-style-type: none"> • Anatomy of the Central Nervous System • Clinical Biochemistry II • Kinesiology in Physical Education and Health • Histology: Systems Morphology • Podiatry II • Human Physiology II
Year 2, Autumn Semester	<ul style="list-style-type: none"> • Podiatric Anatomy • Microbiology and Infectious Diseases • General Podiatric Clinical Surgery • Biomechanics and Podiatry • Podiatric Surgery I • Pathology • Biophysics and Radiation Protection • Podiatric Radiology
Year 2, Winter Semester	<ul style="list-style-type: none"> • Pharmacology • Pathomechanics • Podiatry III • Orthotics and Prosthetics • Podiatric Surgery II • Introduction to Psychopathology
Year 2, Summer Semester	<ul style="list-style-type: none"> • Podiatric Clinic I • Scientific Documentation in the Clinical Sciences
Year 3, Autumn Semester	<ul style="list-style-type: none"> • Dermatology • Emergency Care • Internal Medicine • Clinical Neurology • Pharmacology and Podiatry • Podiatry IV • Podiatric Orthopaedics I • Podiatric Clinic II • Radiology Clinic I • Pediatric Clinic I • Orthopaedic Clinic I • Podiatric Surgery Clinic I • Laboratory Analyses

Year, Semester	Course
Year 3, Winter Semester	<ul style="list-style-type: none"> • Traumatology • Podiatric Orthopaedics II • General Orthopaedics • Podogeriatrics • Peripheral Vascular Diseases • Podopediatrics • Podiatric Pathology • Forefoot Surgery • Podiatric Clinic III • Radiology Clinic II • Pediatric Clinic II • Orthopaedic Clinic II • Podiatric Surgery Clinic II • Epidemiology and Community Health
Year 3, Summer Semester	<ul style="list-style-type: none"> • Reconstructive Surgery • Sports Podiatry • Podiatric Clinic IV • Radiology Clinic III • Pediatric Clinic III • Orthopaedic Clinic III • Podiatric Surgery Clinic III • Rotation in Internal Medicine • Externship in Podiatric Medicine I
Year 4, Autumn Semester	<ul style="list-style-type: none"> • Clinic Management • Physical Medicine • Medical Ethics and Legal Issues • Podiatric Surgery III • Podiatric Clinic V • Radiology Clinic IV • Pediatric Clinic IV • Orthopaedic Clinic IV • Podiatric Surgery Clinic IV • Externship in Podiatry II • Elective Externship
Year 4, Winter Semester	<ul style="list-style-type: none"> • Radiology Clinic V • Pediatric Clinic V • Orthopaedic Clinic V • Podiatric Surgery Clinic V • Clinical Practicum in Private Clinic

The table summarizes the courses for the podiatry program at the Université du Québec à Trois-Rivières in Quebec (Muenzen & Dionne, 2013).

Table 7. Training Requirements for Ankle Surgery in New York State

Ankle Surgery	Training Requirements
<p style="text-align: center;">Standard ankle surgery</p> <p>(This consists of surgery on the ankle which may include soft tissue and osseous (i.e., bone-related)^{rr} procedures, except those procedures specifically authorized for podiatrists holding a podiatric advanced ankle surgery privilege as outlined below.)</p>	<ul style="list-style-type: none"> • Three-year residency program in podiatric medicine and surgery accredited by the Council on Podiatric Medical Education plus certification in reconstructive rearfoot and ankle surgery by the American Board of Podiatric Surgery; or • Three-year residency program in podiatric medicine and surgery accredited by the Council on Podiatric Medical Education plus qualification for the certification in reconstructive rearfoot and ankle surgery by the American Board of Podiatric Surgery with acceptable training and experience that consists of not less than ten ankle procedures in the five years immediately preceding application; or • Two-year residency program in podiatric medicine and surgery accredited by the Council on Podiatric Medical Education plus certification in reconstructive rearfoot and ankle surgery by the American Board of Podiatric Surgery with acceptable training and experience that consists of not less than 20 ankle procedures in the five years immediately preceding application.
<p style="text-align: center;">Advanced ankle surgery</p> <p>(This consists of surgery on the ankle which may include ankle fracture fixation, ankle fusion, ankle arthroscopy,^{ss} insertion or removal of external fixation pins into or from the tibial diaphysis (i.e., the shin bone shaft) at or below the level of the myotendinous junction (i.e., the muscle-tendon junction) of the triceps surae (i.e., the triceps of the lower leg or calf muscles) (but does not include the surgical treatment of complications within the tibial diaphysis related to the use of such external fixation pins), and insertion and removal of retrograde tibiototalcaneal (i.e., the ankle and subtalar combined) intramedullary rods^{tt} and locking screws up to the level of the myotendinous junction of the triceps surae.)</p>	<ul style="list-style-type: none"> • Three-year residency program in podiatric medicine and surgery accredited by the Council on Podiatric Medical Education plus certification in reconstructive rearfoot and ankle surgery by the American Board of Podiatric Surgery with acceptable training and experience that consists of not less than ten ankle procedures in the five years immediately preceding application and not less than 15 ankle fracture fixation, ankle fusion, and ankle arthroscopy procedures in the ten years immediately preceding application; or • Two-year residency program in podiatric medicine and surgery accredited by the Council on Podiatric Medical Education plus certification in reconstructive rearfoot and ankle surgery by the American Board of Podiatric Surgery with acceptable training and experience that consists of not less than 20 ankle procedures in the five years immediately preceding application and not less than 15 ankle fracture fixation, ankle fusion, and ankle arthroscopy procedures in the ten years immediately preceding application.

The table summarizes the training requirements for ankle surgery in New York State (New York State Education Department, 2014a). Similar requirements for ankle surgery were found in Connecticut (Connecticut Statutes, n.d.).

^{rr} Medical language was interpreted using three online dictionaries (i.e., [Merriam-Webster, 2014](#), [Free Dictionary, 2014](#), [Dictionary.com, 2014](#)) and additional sources identified through Google searches.

^{ss} [Ankle arthroscopy](#) is a surgical procedure that uses a thin fibre-optic camera or “arthroscope” that magnifies and transmits images of the ankle to a video screen.

^{tt} [Intramedullary rods](#) are a means of fracture fixation in which a long metallic implant is inserted at one end of a long bone through the [medullary canal](#).

Table 8. Regulatory Bodies for Podiatrists and/or Chiropodists in Select Jurisdictions

Country	Jurisdiction	Regulatory Body	Reference
Canada	Ontario	College of Chiropodists of Ontario	College of Chiropodists of Ontario (2013); Canadian Information Centre for International Credentials (2011)
	Alberta	College of Podiatric Physicians of Alberta	Alberta Learning Information Service (2014b); Canadian Information Centre for International Credentials (2011)
	British Columbia	College of Podiatric Surgeons of British Columbia	British Columbia Government (2012); Canadian Information Centre for International Credentials (2011); British Columbia Regulation (2010)
	Manitoba	College of Podiatrists of Manitoba	Manitoba Laws (2001); Canadian Information Centre for International Credentials (2011)
	New Brunswick	New Brunswick Podiatry Association	Canadian Information Centre for International Credentials (2011)
	Quebec	Ordre des podiatres du Québec	Canadian Information Centre for International Credentials (2011)
	Saskatchewan	Saskatchewan College of Podiatrists	Canadian Information Centre for International Credentials (2011); Saskatchewan Immigration (2011)
US	Connecticut	Connecticut Board of Examiners in Podiatry	Connecticut Statutes (n.d.)
	Georgia	State Board of Podiatry Examiners	Georgia Statutes (n.d.)
	South Carolina	South Carolina Board of Podiatry Examiners	South Carolina Code of Laws (2013)
UK	UK	Health and Care Professions Council	College of Podiatry (n.d.)
Australia	Victoria	Podiatrists Registration Board of Victoria	Australian Podiatry Association (2002)
New Zealand	New Zealand	Podiatrists Board of New Zealand	Podiatrists Board of New Zealand (n.d.)

Table 9. Registration and Licensure Requirements for Podiatrists and/or Chiropractors in Select Canadian Provinces

Jurisdiction	Requirement	Reference
Ontario	<p>To practice in Ontario, podiatrists must have a postgraduate Doctor of Podiatric Medicine degree while chiropractors must complete a post-secondary chiropody program. To register,^{uu,vv} podiatrists and chiropractors must also:</p> <ul style="list-style-type: none"> • Complete a program^{www} and a registration examination approved by the Council of the College of Chiropractors of Ontario; • Conduct clinical practice for at least three months during the two years immediately preceding the application;^{xx} • Provide proof of reasonable fluency in written and spoken English or French; • Provide proof of Canadian citizenship or permanent resident status or authorization under the <i>Immigration and Refugee Protection Act</i> to practice the profession in Canada;^{yy} and • Show evidence of not having been found guilty of any criminal offence, professional misconduct, incompetence, or incapacity. 	Health Force Ontario (2014); Ontario Podiatric Medical Association (2014); College of Chiropractors of Ontario (2013); Baumann & Blythe (2009); Office of the Fairness Commissioner (2007)
Alberta	<p>To register as a podiatrist, an applicant must have:</p> <ul style="list-style-type: none"> • Graduated from a college of podiatric medicine with a Doctor of Podiatric Medicine degree in Canada or the US, approved by the Alberta Board of Examiners in Podiatry or the US Council on Podiatric Medical Education; • Completed the American Podiatric Medicine Licensing Examination sponsored by the National Board of Podiatric Medical Examination; • Completed the Podiatric Medical Licensing Examination for States; and • Completed a two-year postgraduate residency program approved by the US Council on Podiatric Medical Education of the American Podiatric Medical Association. 	Alberta Learning Information Service (2014b); Muenzen & Dionne (2013)
British Columbia	The registration requirements are similar to those described above for Alberta.	Muenzen & Dionne (2013)

^{uu} As of July 1, 1993, new members registering with the College of Chiropractors of Ontario are required to be registered as chiropractors. However, those podiatrists who registered with the College before July 1, 1993 are permitted to continue to practice as podiatrists. Ontario's practice of registering chiropractors, but not podiatrists, makes it unique in North America (Office of the Fairness Commissioner, 2007).

^{vv} The registration regulation for the College of Chiropractors of Ontario sets out three categories of registration certificates: General, Academic, and Educational. The requirements outlined in this review pertain to the General certificate. For more information, see Office of the Fairness Commissioner (2007) and College of Chiropractors of Ontario (2013).

^{www} Applicants whose school is not on the approved list can submit their educational information for evaluation and assessment by the College (Health Force Ontario, 2014).

^{xx} This does not apply to those who successfully completed an approved program within two years preceding the date of the application (Health Force Ontario, 2014).

^{yy} This requirement is exemptible (Health Force Ontario, 2014).

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Jurisdiction	Requirement	Reference
Manitoba	<p>The registrar shall approve an application for registration as a podiatrist if the applicant:</p> <ul style="list-style-type: none"> • Meets the competency requirements approved by the Council of the College of Podiatrists of Manitoba; • Establishes that his or her name has not been removed for cause from a register of persons authorized to engage in the practice of podiatry in Canada or elsewhere; • Establishes that he or she has not been suspended as a result of professional misconduct by a regulatory authority governing the practice of podiatry in Canada or elsewhere; and • Meets any other requirements set out in the regulations set out in the 2001 <i>Podiatrists Act</i>. 	Manitoba Laws (2001)
Saskatchewan	<p>The Council of the Saskatchewan College of Podiatrists may register as a member, and issue a license to practice to,^{zz} a person who produces evidence establishing to the satisfaction of the Council that the person has:</p> <ul style="list-style-type: none"> • Complied with the bylaws with respect to registration as a member; • Completed a podiatry education program that is prescribed in the bylaws;^{aaa} and • Passed the examinations prescribed or recognized by the Council pursuant to the bylaws (or is registered as the equivalent of a podiatrist in good standing pursuant to the legislation of another jurisdiction in Canada). 	Saskatchewan Statutes (2007)

^{zz} The Saskatchewan College of Podiatrists issues two types of practice licenses: 1) a General Practice License; and 2) a Restricted Practice License. For more information, see [Saskatchewan Immigration \(2011\)](#).

^{aaa} The Saskatchewan College of Podiatrists recognizes podiatry educational programs from the US, the UK, Australia, New Zealand, and South Africa (Saskatchewan Immigration, 2011).

Table 10. Licensure Requirements for Podiatrists in Select US Jurisdictions

Jurisdiction	Licensure Requirement	Reference
Connecticut	<p>A podiatrist must have received a diploma or other certificate of graduation from an accredited school or college of chiropody or podiatry that is approved by the Board of Examiners in Podiatry with the consent of the Commissioner of Public Health. The podiatrist must also have obtained a license from the Department of Public Health after meeting the following requirements. A graduate of an approved school of chiropody or podiatry subsequent to:</p> <ul style="list-style-type: none"> • July 1, 1947, shall present satisfactory evidence that he or she has been a resident student through not less than four graded courses of not less than 32 weeks each in such approved school and has received the degree of Doctor of Surgical Chiropody or Doctor of Podiatry or another equivalent degree; • July 1, 1951, shall present satisfactory evidence that he or she has completed, before beginning the study of podiatry, a course of study of an academic year of not less than 32 weeks' duration in a college or scientific school approved by the Board of Examiners in Podiatry, with the consent of the Commissioner of Public Health; and • July 1, 1971, shall present satisfactory evidence that he or she has completed a course of study of two such pre-podiatry college years and that he or she received the degree of Doctor of Podiatric Medicine. 	Connecticut Statutes (n.d.)
Georgia	<p>A license to practice podiatric medicine shall be issued to any person who:</p> <ul style="list-style-type: none"> • Is a graduate of an accredited college of podiatric medicine approved by the State Board of Podiatry Examiners; • Holds a DPM degree or its equivalent; • Satisfactorily passes a board approved examination, if an examination is required by the board; • Successfully completes postgraduate training of no less than 12 months as a resident in podiatric medicine and surgery in a program or institution approved by, and in good standing with, the board; and • Has attained the age of 21 years. 	Georgia Statutes (n.d.)
Kansas	<p>All applicants for a license to practice podiatry under the provisions of the <i>Podiatry Act</i>:</p> <ul style="list-style-type: none"> • Shall have attained the age of 21 years; • Shall have completed at least four years of instruction in, and be graduates of, a school of podiatry which is recognized as being in good standing by the Kansas State Board of Healing Arts; and • Commencing with applicants for a license to be granted on or after July 1, 1988, shall have completed acceptable postgraduate study as may be established by the board by rules and regulations. <p>Applicants licensed, registered, or certified by a board of examiners of any other state or country whose requirements for licensure, registration, or certification are substantially equal to those of Kansas in the opinion of the Kansas State Board of Healing Arts may be granted a license without examination.</p>	Kansas Statutes (2009)

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Jurisdiction	Licensure Requirement	Reference
New York	<p>To qualify for a license as a podiatrist, an applicant shall fulfill the following requirements:</p> <ul style="list-style-type: none"> • <u>Education</u>: Have received an education, including a DPM degree, in accordance with the commissioner's regulations; • <u>Experience</u>: Have experience satisfactory to the board and in accordance with the commissioner's regulations; • <u>Examination</u>: Pass an examination satisfactory to the board and in accordance with the commissioner's regulations; • <u>Age</u>: Be at least 21 years of age; • <u>Character</u>: Be of good moral character as determined by the department; and • <u>Continuing Education</u>: Attend the education programs conducted by the podiatry society of the state of New York or the equivalent of such educational programs, as approved by the state board for podiatry in accordance with the commissioner's regulations. 	New York State Education Department (2014c)
Rhode Island	<p>An applicant seeking licensure for podiatry must:</p> <ul style="list-style-type: none"> • Be 18 years of age or older; • Be of good moral character; • Have completed a satisfactory course of at least three years of study in a duly recognized college or university; • Provide evidence of satisfactory completion of a course of study in podiatric medicine approved and accredited by the Council on Podiatric Medical Education of the American Podiatric Medical Association; • Have satisfactorily completed a one-year residency in podiatric medicine as defined, recognized, and accredited by the Council on Podiatric Medical Education of the American Podiatric Medical Association; • Have satisfactorily passed the National Board of Podiatric Examination and the Podiatric Medical Licensing Examination; and • Meet such other requirements as set forth by regulation or as may be established by the Board of Examiners of Podiatry. 	Rhode Island Department of Health (2007)
South Carolina	<p>An applicant for licensure must have completed a one-year post-podiatric medical formal preceptorship or residency program approved by the American Association of Podiatric Physicians and Surgeons or the American Podiatric Medical Association. The Board of Podiatric Examiners shall conduct an examination of any applicant who submits satisfactory evidence that he or she has:</p> <ul style="list-style-type: none"> • Received four years of high school training; • Completed at least three years of pre-podiatry training at a recognized college; and • Received a diploma or certificate of graduation from a recognized college of podiatric medicine which has been accredited by the Council on Podiatric Medical Education. <p>For the purposes of examination, the board shall use the National Board of Podiatry Examination and may use other written or oral examinations as the Board considers necessary. However, a written examination administered by the Board must be a nationally recognized examination or must be administered by at least one other state.</p>	South Carolina Code of Laws (2013)

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Jurisdiction	Licensure Requirement	Reference
Wisconsin	<p>“Podiatrist” means an individual: 1) possessing the degree of Doctor of Podiatric Medicine or Doctor of Surgical Chiropody or equivalent degree, as determined by the affiliated credentialing board; and 2) holding a license to practice podiatry or podiatric medicine and surgery granted by the affiliated credentialing board. The affiliated credentialing board shall grant a license as a podiatrist to a person who:</p> <ul style="list-style-type: none"> • Submits evidence satisfactory to the affiliated credentialing board that the applicant does not have an arrest or conviction record; • Submits evidence satisfactory to the affiliated credentialing board that: <ul style="list-style-type: none"> ○ The applicant is a graduate of a school of podiatric medicine and surgery approved by the affiliated credentialing board and possesses a diploma from such school conferring the degree of doctor of podiatric medicine, or equivalent degree as determined by the affiliated credentialing board, unless the affiliated credentialing board waives these requirements; ○ The applicant has completed two years of postgraduate training in a program approved by the affiliated credentialing board or one year of postgraduate training in a program approved by the affiliated credentialing board if the one-year postgraduate training was completed by June 1, 2010;^{bbb} and • Passes an examination. 	Wisconsin Statutes (2014)
Wyoming	<p>The application for licenses shall be granted to an applicant who presents proof that he/she:</p> <ul style="list-style-type: none"> • Has satisfactorily completed two years in a recognized college of liberal arts or of the sciences; • Is a graduate of a regularly established school of podiatry recognized by the American Podiatric Medical Association or its successor and the board which requires as a prerequisite to graduation the completion of at least 3,360 scholastic hours of classroom work; • Has completed a residency approved by the board; and • Has passed a satisfactory examination as prepared under the rules and regulations of the board of registration in podiatry. 	Wyoming Statutes (n.d.)

^{bbb} No information was found on the terms of this requirement after June 1, 2010.

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Table 11. Podiatry Education and Training Requirements in Various Jurisdictions

Jurisdiction	Job Title	Prerequisite(s) for Admission into Chiropody/Podiatry Program	Required Degree	Additional Training
Ontario	Chiropodist	<ul style="list-style-type: none"> • Bachelor of Science degree or Bachelor of Arts degree in Kinesiology; • One full credit equivalent in human physiology; and • One full credit equivalent in human anatomy 	Three-year Graduate Advanced Diploma of Health Sciences (Chiropody)	
Alberta	Podiatrist	Podiatry education may be obtained from Quebec or the US. <ul style="list-style-type: none"> • In Quebec: <ul style="list-style-type: none"> ○ College diploma or an equivalent; and ○ Basic science prerequisite courses • In the US: <ul style="list-style-type: none"> ○ Minimum of three years or 90 semester hours of undergraduate credit at a university; ○ Undergraduate courses in biology, organic chemistry, inorganic chemistry, physics, mathematics, and English; and ○ Completion of the Medical College Admissions Test 	Four-year Doctor of Podiatric Medicine degree	Residency
British Columbia	Podiatrist	Podiatry education may be obtained from Quebec or the US. <ul style="list-style-type: none"> • In Quebec: <ul style="list-style-type: none"> ○ College diploma or an equivalent; and ○ Basic science prerequisite courses • In the US: <ul style="list-style-type: none"> ○ Minimum of three years or 90 semester hours of undergraduate credit at a university; ○ Undergraduate courses in biology, organic chemistry, inorganic chemistry, physics, mathematics, and English; and • Completion of the Medical College Admissions Test 	Four-year Doctor of Podiatric Medicine degree	Residency

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Jurisdiction	Job Title	Prerequisite(s) for Admission into Chiropody/Podiatry Program	Required Degree	Additional Training
Quebec	Podiatrist	<p>Podiatry education may be obtained from Quebec or the US.</p> <ul style="list-style-type: none"> • In Quebec: <ul style="list-style-type: none"> ○ College diploma or an equivalent; and ○ Basic science prerequisite courses • In the US: <ul style="list-style-type: none"> ○ Minimum of three years or 90 semester hours of undergraduate credit at a university; ○ Undergraduate courses in biology, organic chemistry, inorganic chemistry, physics, mathematics, and English; and • Completion of the Medical College Admissions Test 	Four-year Doctor of Podiatric Medicine degree	
US	Podiatrist (certified in foot surgery)	<ul style="list-style-type: none"> • Minimum of three years or 90 semester hours of undergraduate credit at a university; • Undergraduate courses in biology, organic chemistry, inorganic chemistry, physics, mathematics, and English; and • Completion of the Medical College Admissions Test 	Four-year Doctor of Podiatric Medicine degree	Two-year Podiatric Medicine and Surgery residency
	Podiatrist (certified in reconstructive rearfoot/ankle surgery)	US Podiatrist (certified in foot surgery) credentials (i.e., Four-year Doctor of Podiatric Medicine degree plus a two-year residency in foot surgery)		Additional year of Podiatric Medicine and Surgery residency
UK	Podiatrist	No information was found.	Three-year Bachelor of Science degree in Podiatry or Podiatric Medicine or four-year Honours Bachelor of Science degree in Podiatry or Podiatric Medicine	
	Podiatric surgeon	UK podiatrist credentials (i.e., Three-year Bachelor of Science degree in Podiatry or Podiatric Medicine or four-year Honours Bachelor of Science degree in Podiatry or Podiatric Medicine) plus 1-2 years of clinical practice	Three-year Master's degree in the theory of podiatric surgery	One-year surgical training
	Consultant podiatric surgeon	UK podiatric surgeon credentials (i.e., Three-year Bachelor of Science degree in Podiatry or Podiatric Medicine or four-year Honours Bachelor of Science degree in Podiatry or Podiatric Medicine and three-year Master's degree in the theory of podiatric surgery plus 1-2 years of clinical practice and one-year surgical training)		Five additional years of clinic-based surgical training

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Jurisdiction	Job Title	Prerequisite(s) for Admission into Chiropody/Podiatry Program	Required Degree	Additional Training
Australia	Podiatric surgeon	No information was found.	<ul style="list-style-type: none"> • Three- or four-year Bachelor of Science degree in Podiatry; and • Master's degree in podiatric surgery, podiatric medicine, medical science, or public health; 	Three-year fellowship

APPENDIX B

Table 12. Description of the Content in the Peer-Reviewed Articles and Grey Literature Being Summarized^{ccc}

No.	Description	Reference
Review/Overview/Commentary Articles in Peer-Reviewed Journals		
1	<p>Purpose: This overview by a consultant podiatric surgeon describes podiatric surgery provided by the allied health professionals in the UK. Relevant Information: Pre-registration training comprises a three- or four-year Bachelor of Science degree, usually with many shared modules across other health professions programs. Once qualified, podiatrists are able to offer a range of treatments, undertake minor surgical procedures, and administer local anaesthetics. Postgraduate training in podiatric surgery has been offered to podiatrists since the early 1970s and has continued to evolve as educational demands have changed. Initially, postgraduate examination was offered exclusively by the professional bodies, and early training followed a pupillage system. Over the last 20 years, the emphasis has moved from training provided by professional bodies towards the universities and the National Health Service (NHS). Today, podiatrists who have completed an undergraduate degree and at least two years of postgraduate experience in podiatry must next study a Master of Science (MSc) in the theory of podiatric surgery. These degrees are offered at a number of universities in England and Scotland and are typically studied part-time whilst the podiatrist also gains further clinical experience. All candidates then undergo a formal objective assessment of their skills, knowledge, and understanding before applying for a training post. Initial surgical training is delivered over a minimum two-year period, though more typically training posts are offered on three-year contracts. During training, two formal examinations must be passed within a maximum of three attempts. Successful completion leads to the award of Fellowship of the College of Podiatry. Having gained a fellowship in podiatric surgery, candidates are required to complete an additional Certificate of Completion of Specialist Podiatric Training (CCSPT). This is achieved through a three-year post as a podiatric registrar. On completion of the MSc, fellowship examinations, and surgery training to CCSPT, the candidate may apply for a consultant podiatric surgeon position in the NHS.</p>	<p>Maher, A. (2013). Podiatry: An illustration of surgery provided by allied health professionals. <i>Journal of Perioperative Practice</i>, 23(10), 218-21.</p>
2	<p>Purpose: This overview by medical professionals describes the role of a podiatrist in diabetic limb salvage in the US and internationally. Relevant Information: The field of podiatry continues to evolve as a surgical subspecialty with increasing training requirements and standardization. Education: The first two years cover basic science curriculum similar to traditional medical education with the exception of early introduction to biomechanical principles. The next two years begin clinical education that includes a growing focus in pathologies of the lower extremity. Clinical rotations include general surgery, vascular surgery, internal medicine, infectious disease, and emergency medicine. These rotations can vary depending on the interest of the student. Training: Residencies are typically three years in duration with early surgical focus on the lower extremity. The first year is primarily an intern year in internal medicine, emergency medicine, general surgery, orthopaedic surgery, and vascular surgery. These rotations can vary</p>	<p>Kim, P. J., Attinger, C. E., Evans, K. K., & Steinberg, J. S. (2012). Role of the podiatrist in diabetic limb salvage. <i>Journal of Vascular Surgery</i>, 56(4), 1168-72.</p>

^{ccc} Please note the studies, programs, and findings presented in this table may originate from jurisdictions with health systems that are significantly different from Ontario's. If there is intent to draw heavily from one or more sources presented in this table, we recommend that you contact the lead author of this review for assistance with evaluating the local applicability.

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No.	Description	Reference
	between residency programs. The second and third years include more surgery of the foot and ankle on podiatric, orthopaedic, and limb salvage services. After the completion of a residency, a fellowship in sports medicine, advanced reconstructive surgery, or limb salvage can be pursued.	
3	<p>Purpose: This historical overview by a Doctor of Podiatric Medicine (DPM) describes the historical and current status of DPMs in the US. Relevant Information: In the US, similar to the Doctor of Medicine (MD) and Doctor of Osteopathic Medicine (OD), immediately after a DPM completes podiatric medical school, he or she does not yet have adequate knowledge and skills to engage in the broad spectrum of practice in the specialty. As with the MD and OD, in almost every state across the US, a DPM must complete a minimum of one year of graduate medical education to be eligible for a license. In essence, similar to the new MD or OD graduate, graduation from podiatric medical school prepares one only to enter graduate medical education as a podiatric medical resident. Indeed, the MD, OD, and DPM are the only health professions that require graduate education after completing the undergraduate professional degree. In addition, because of the need to acquire board certification, almost every podiatric medical graduate completes at least two years of graduate medical education, and although a three-year residency requirement is not yet in effect, it is becoming the trend. This is partially due to the profession continuing its efforts to achieve parity among its MD and OD colleagues.</p>	Levy, L. A. (2012). A historical and current analysis for the DPM acquiring an MD or DO degree and an unrestricted medical license. <i>Journal of American Podiatric Medical Association</i> , 102(2), 172-6.
4	<p>Purpose: This overview by researchers describes podiatry in the UK. Relevant Information: <u>Training:</u> The authors suggested that perhaps the most comprehensive training for podiatric practitioners exists within the US, where podiatry training consists of a four-year postgraduate internship. Following their degree, students complete a two- to three-year residency. Podiatric education in the UK (with the exception of Scotland) is similar in both curriculum design and operational practice to that of Australia, with the notable exception being that the degree in the UK is of three years in duration whereas in both Scotland and Australia, it is a four-year program. Similar to Australasia, UK podiatric practitioners may continue their studies and qualify as podiatric surgeons. The training requires a number of years' study at postgraduate levels, including a Master of Science in the principles of podiatric surgery, leading to a year as a pre-surgical trainee working within a designated podiatric surgical team. <u>Regulation:</u> In the UK, individuals may not use the title "chiropodist" or "podiatrist" unless they are registrants of the Health and Care Professions Council. These are now protected titles and their use by non-registrants is unlawful. However, there is currently no statutory registration/regulation for practitioners in the private foot health sector. Only the titles of "chiropodist" and "podiatrist" are protected. As such, there is no legal or formal limitation to foot health practitioners undertaking an identical role to that of a podiatrist in the private sector.</p>	Hayes, C., & Bussey, S. (2011). Podiatric medicine unravelled. <i>British Journal of Healthcare Assistants</i> , 5(12), 596-9.
5	<p>Purpose: This overview by the Deputy Executive Director of the American Podiatric Medical Association describes podiatric medicine in the US. Relevant Information: <u>Training:</u> During a residency, podiatrists receive advanced training in medicine and surgery and participate in clinical rotations in anaesthesiology, internal medicine, pathology, radiology, emergency medicine, and orthopaedic and general surgery, as well as elective rotations. Emphasis is placed on patient diagnosis and management throughout residency. The residency in Podiatric Medicine and Surgery is a resource-based, competency-driven, assessment-validated program that consists of two or three years of postgraduate training in inpatient and outpatient medical and surgical management. The principal difference between two- and three-year programs is that residents in a three-year program have more training experiences in reconstructive rearfoot/ankle surgery and trauma. <u>Regulation:</u> For more than 90 years, the Council on Podiatric Medical Education (CPME) has served as the professional accrediting agency for podiatric medicine, evaluating and promoting the quality of podiatric education, postgraduate education, certification, and continuing education for DPMs. The CPME, through its Joint Committee on the Recognition</p>	Levrio, J. (2009). Podiatric medicine: A current assessment. <i>Journal of the American Podiatric Medical Association</i> , 99(1), 65-72.

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No.	Description	Reference
	<p>of Specialty Boards, has been responsible for monitoring specialty certifying boards in podiatric medicine since the early 1960s. The CPME currently recognizes two certifying boards, the American Board of Podiatric Surgery (ABPS) and the American Board of Podiatric Orthopaedics and Primary Podiatric Medicine (ABPOPPM). The ABPS certifies in foot surgery and reconstructive rearfoot/ankle surgery. One must be certified in foot surgery before being eligible for certification in reconstructive rearfoot/ankle surgery. Certification by ABPOPPM indicates that the podiatrist has been judged by peers to have demonstrated knowledge and competence in the areas being tested.</p>	
6	<p>Background: Local anaesthesia has been used by British podiatrists since the early 1960s. The use of local anaesthesia has allowed for the advancement of scope of practice and the development of podiatric surgery. Local anaesthesia is, however, associated with potential risks and adverse reactions including toxicity. Objectives: To review the current literature on the subject of local anaesthetic toxicity and to consider recent developments in the management of acute toxicity. Results: Local anaesthetic techniques are now taught as an integrated element of the undergraduate podiatry program, allowing podiatrists to administer local anaesthetics upon the completion of their degree training. Of particular significance is that the local anaesthetic blocks utilized in podiatry are routinely administered by the podiatrist undertaking the treatment. In the case of podiatric surgery, an appropriately trained podiatrist team member often administers the block. This is in stark contrast to medicine where an anaesthetist would usually be expected to administer the local anaesthetic agent and take responsibility for and manage any medical complications arising from the administration of the local anaesthetic agent. Therefore, podiatrists must be trained and able to appropriately assess and manage the potential complications of local anaesthesia. Complications include allergic reactions and acute toxicity – the latter as a consequence of excessive dosage, pathological states such as liver failure or, more commonly, a direct result of accidental intravascular injection. Conclusions: Local anaesthesia, although safe, has the potential to cause serious harm in the event of toxicity. Appropriate steps should be taken to minimize the risk of toxicity, and should it occur, measures should be applied to minimize the consequences of toxicity.</p>	<p>Maher, A. J., Metcalfe, S. A., & Parr, S. (2008). Local anaesthetic toxicity. <i>Foot</i>, 18(4), 192-7.</p>
Original Research Papers in Peer-Reviewed Journals		
7	<p>Background: Podiatrists form an integral part of the multidisciplinary foot team in the treatment of diabetic foot-related complications. Due to unforeseen circumstances, 50% of the non-operative podiatry team within a specialist diabetes foot service in the UK was lost for almost seven months in 2010. The original non-operative podiatry team consisted of 3.89 whole-time equivalent (WTE) podiatrists. In the seven-months, podiatry staffing was reduced to 1.89 WTE and partially replaced by a temporary non-operative, non-specialist podiatrist to cover for one of the two vacant posts. Specialist podiatrists were defined as podiatrists involved in a MDT tertiary foot clinic for the management of the diabetic foot and its related complications. Objectives and Methods: The authors assessed the economic impact of this loss by examining data for the five years prior to this seven-month interruption and for the two years after “normal service” was resumed. Results: The authors suggested that the loss of the non-operative podiatrists led to a significant rise in the number of admissions into hospitals and that the average hospital length of stay also increased (327 extra bed days during the staff shortage compared to the 12 months prior to service disruption). Further, the total number of follow-ups seen in 2009 dropped by more than 17% in 2010, reflecting a reduction in the clinic’s capacity. During the time that the number of specialist non-operative</p>	<p>Gooday, C., Murchison, R., & Dhatariya, K. (2013). An analysis of clinical activity, admission rates, length of hospital stay, and economic impact after a temporary loss of 50% of the non-operative podiatrists from a tertiary specialist foot clinic in the United Kingdom. <i>Diabetic Foot & Ankle</i>, 4, 21757.</p>

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No.	Description	Reference
	<p>podiatry staff were depleted, and for up to six months after they returned to normal activities, the extra costs to the health care system increased by £89,925 (CAD \$143,140).^{ddd} Conclusions: These findings suggest that specialist non-operative podiatrists involved in the treatment of the diabetic foot may prevent unwarranted hospital admission and increased hospitalization rates by providing skilled assessment and care in the outpatient clinical settings.</p>	
8	<p>Objectives: This study sought to examine the economic value of specialized lower extremity medical care by podiatric physicians, in the treatment of diabetic foot ulcers, by evaluating cost outcomes for patients with diabetic foot ulcers who did and did not receive care from a podiatric physician in the year before the onset of a foot ulcer. Methods: The authors analyzed the economic value among commercially insured patients and Medicare-eligible patients with employer-sponsored supplemental medical benefits. The analysis consisted of two parts. In part I, costs or savings per patient associated with care by podiatric physicians were examined using propensity score matching and regression techniques. In part II, costs or savings to populations were extrapolated. Results: Matched and regression-adjusted results indicated that patients on commercial plans who visited a podiatric physician had USD \$13,474 (CAD \$13,327) lower costs and that patients on Medicare plans who visited a podiatric physician had USD \$3,624 (CAD \$3,584) lower costs compared to patients who did not visit a podiatric physician during a two-year follow-up period;^{eee} both of these findings were statistically significant. Conclusions: These findings suggest that podiatric medical care may reduce the disease and economic burdens of diabetes.</p>	<p>Carls, G. S., Gibson, T. B., Driver, V. R., Wrobel, J. S., Garoufalos, M. G., Defrancis, R. R. et al. (2011). The economic value of specialized lower-extremity medical care by podiatric physicians in the treatment of diabetic foot ulcers. <i>Journal of American Podiatric Medical Association</i>, 101(2), 93-115.</p>
9	<p>Objectives: To determine the effectiveness of receiving care from podiatrists and clinician specialists on diabetes-related lower extremity amputations. Methods: Medicare data (five percent of claims) between 1991 and 2007 were used. Individuals with diabetes-related lower extremity complications were followed for six years. Visits with podiatrists, clinician specialists, and other health professionals were tracked to ascertain whether the receipt of such care reduced the hazards of a lower extremity amputation. Results: Half of the lower extremity complication sample died within six years. More severe lower extremity disease increased the risk of death and amputations. Persons visiting a podiatrist and a clinician specialist within a year prior to developing all stage complications were 19%-64% statistically significantly less likely to undergo amputations compared to those visiting only other health professionals. However, those visiting only a podiatrist were not statistically significantly different from those visiting only other health professionals in undergoing amputations. Conclusions: Individuals with a lower extremity complication had high mortality. Visiting both a podiatrist and a clinician specialist in the year before the lower extremity complication diagnosis was protective of undergoing lower extremity amputations, suggesting a benefit from multidisciplinary care.</p>	<p>Sloan, F. A., Feinglos, M. N., & Grossman, D. S. (2010). Receipt of care and reduction of lower extremity amputations in a nationally representative sample of US elderly. <i>Health Services Research</i>, 45(6 Pt 1), 1740-62.</p>
10	<p>Background: Over 40% of patients with peripheral arterial disease (PAD) have diabetes, and this group of patients have a worse prognosis compared to diabetic patients without PAD. The majority of lower limb amputations in the UK are being performed for diabetic vascular disease. Objectives: The authors set out to identify methods to reduce the amputation rate for patients with diabetes. Methods: A prospective database was established for patients with diabetic foot complications. For six months, a mapping exercise was undertaken to identify areas of poor practice. A protocol was then introduced and implemented by a diabetic foot protection team (DFPT) working across primary and secondary care. The results of the first three years of this project are presented.</p>	<p>Bowen, G., Barton, H., Haggan, G., Brooke, J., Sweet, J., Baxter, S., et al. (2008). The impact of a diabetic foot protection team (DFPT) on outcomes for patients with</p>

^{ddd} The Canadian Dollar (CAD) amount was calculated using the average exchange rate for 2010 (£1 = 1.5918 CAD) ([Bank of Canada, 2010](#)).

^{eee} The Canadian Dollar (CAD) amount was calculated using the average exchange rate for 2011 (1 US Dollar (USD) = 0.9891 CAD) ([Bank of Canada, 2011](#)).

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No.	Description	Reference
	<p>Results: Minor amputations increased by 42%, but there was an overall 60% reduction in major amputations carried out over three years. The authors did not define major and minor amputation. There was a 7% yearly increase in patients treated, and hospital admissions increased from 118 to 174 patients per year. However, despite this, median length of hospital stay reduced from 47 to 19 days, saving 5,662 bed days. Conclusions: The findings suggest that a DFPT may reduce major amputation rates and hospitalization in patients with diabetes. The authors noted that DFPT is highly cost-effective, reducing length of stay by 60%. A national approach to the problem of diabetic vascular disease could make a major impact on amputation rates in the UK. Notes: The description of this study was available only from the abstract of its paper presented at the 42nd Annual Scientific Meeting of the Vascular Society of Great Britain and Ireland in 2007.</p>	<p>diabetic vascular disease. <i>British Journal of Surgery</i>, 95(2), 4-5.</p>
11	<p>Objectives: There is a lack of continuous, longitudinal, population-based data on lower extremity amputation (LEA) in the UK. The authors present accurate data on trends in diabetes-related (DR) LEAs and non-DRLEAs in the South Tees area in the UK over a continuous five-year period. Methods: All cases of LEA from July 1, 1995 to June 30, 2000 within the area were identified. Estimated ascertainment using capture-recapture analysis approached 100% for LEAs in the area. Data were collected longitudinally using the standard method of the Global Lower Extremity Amputation Study protocol. Results: Over five years, there were 454 LEAs in the South Tees area, of which 223 were DR (49%). The major DRLEA rates in people with diabetes fell from 310.5 to 75.8 per 100,000 people with diabetes after establishing the foot care team between 1995 and 2000. The minor DRLEA rates in people with diabetes did not significantly change over the five years. Over the same period, non-DRLEAs increased from 12.3 to 22.8 of 100,000 people without diabetes. Conclusions: The findings suggest that in the South Tees area, at a time when major non-DRLEA rates increased, major DRLEA rates fell. These diverging trends mark a significant improvement in care for patients with diabetic foot disease as a result of better organized diabetes.</p>	<p>Canavan, R. J., Unwin, N. C., Kelly, W. F., & Connolly, V. M. (2008). Diabetes- and nondiabetes-related lower extremity amputation incidence before and after the introduction of better organized diabetes foot care: Continuous longitudinal monitoring using standard method. <i>Diabetes Care</i>, 31(3), 459-63.</p>
12	<p>Objectives: To assess changes in diabetic lower extremity amputation rates in a defined, relatively static population over a ten-year period following the introduction of a multidisciplinary foot team in the UK. Methods: All diabetic patients with foot problems admitted to Ipswich Hospital, a large district general hospital, were identified by twice-weekly surveillance of all relevant in-patient areas. Outcomes including amputations were recorded. Results: The incidence of major amputations fell 62%, from 7.4 to 2.8 per 100,000 of the general population. Total amputation rates also decreased (40%) but to a lesser extent due to a small increase in minor amputations. Expressed as incidence per 10,000 people with diabetes, major amputations fell 84% from 41.4 to 6.7, and minor amputations fell 21% from 11.8 to 9.3. Conclusions: Significant reductions in amputation rates occurred over the ten-year period following improvements in foot care services, including multidisciplinary team work.</p>	<p>Krishnan, S., Nash, F., Baker, N., Fowler, D., & Rayman, G. (2008). Reductions in diabetic amputations over 11 years in a defined UK population. <i>Diabetes Care</i>, 31(1), 99-101.</p>
13	<p>Objectives: To demonstrate the effectiveness of a diabetic foot disease management program in a managed care organization. Methods: The authors implemented a lower extremity disease management program consisting of screening and treatment protocols for diabetic members in a managed care organization. Screening consisted of evaluation of neuropathy, peripheral vascular disease, deformities, foot pressures, and history of lower extremity pathology. Patients were stratified into low- and high-risk groups, and implemented preventive or acute care protocols. Utilization was tracked for 28 months and compared to 12 months of historic data prior to implementation of the disease management program. Results: After the implementation the disease management program, the incidence of amputations decreased 52% from 128.9 per 10,000 diabetics per year to 61.8, which was a statistically significant finding. The number of foot-related hospital admissions decreased 38% from 228.6 per 10,000 members per year to 142.3. The</p>	<p>Lavery, L. A., Wunderlich, R. P., & Tredwell, J. L. (2005). Disease management for the diabetic foot: Effectiveness of a diabetic foot prevention program to reduce amputations and hospitalizations. <i>Diabetes Research and Clinical Practice</i>,</p>

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No.	Description	Reference
	average inpatient length of stay was reduced 22% from 4.75 to 3.72 days. Conclusions: A population-based screening and treatment program for the diabetic foot may dramatically reduce hospitalizations and clinical outcomes.	70(1), 31-7.
14	Background: Foot screening for risk factors is a prerequisite to the effective and prudent use of available resources but must have a high degree of sensitivity and specificity and must be reliable and reproducible regardless of who is applying the test. Objectives: This study aimed to evaluate variation among clinicians in the assessments of foot health status and risk status in patients with diabetes. Methods: Seventeen clinicians assessed three patients with diabetes using a standardized assessment form and risk classification system. Results: There was substantial variation among clinicians in assessing foot conditions. Variation was also evident in the risk categories allocated to two of the three patients. Conclusions: As a consequence of the variation among clinicians in the foot assessment, the same patient would have received different care pathways to monitor and manage their foot health depending upon which clinician undertook their initial assessment. The authors recommended that more attention is placed on training for objective clinical testing, at both pre- and postgraduate levels.	Thompson, L., Nester, C., Stuart, L. & Wiles, P. (2005). Interclinician variation in diabetes foot assessment – a national lottery? <i>Diabetic Medicine</i> , 22(2), 196-9.
15	Background: The lower extremity amputation rate in people with diabetes is high, and the wound failure rate at the time of amputation is as high as 28%. Even with successful healing of the primary amputation site, some amputations occur in 50% of patients within two to five years. Objectives: The purpose of this study was to provide valid outcome data before (control period) and 18 months after (test period) the implementation of a multidisciplinary team approach using verified methods to improve the institutional care of wounds. Retrospective medical chart review was performed for 118 control patients and 116 test patients. Results: The amputation rate was significantly decreased during the test period (64% for control patients vs. 39% for test patients), and the amputations that were required were at a significantly more distal level. No above-the-knee amputations were required in 45 patients during the test period, compared with 14 of 76 patients during the control period. Conclusions: These outcome data suggest that unified care is an effective approach for the patient with diabetic foot problems.	Meltzer, D. D., Pels, S., Payne, W. G., Mannari, R. J., Ochs, D., Forbes-Kearns, J. et al. (2002). Decreasing amputation rates in patients with diabetes mellitus. <i>Journal of American Podiatric Medical Association</i> , 92(8), 425-8.
16	Objectives: A pilot community-based foot care screening program employing a team approach encompassing the services of a certified diabetes educator and a certified pedorthist was assessed. Methods: A free-standing, community-based outpatient diabetes centre serving people with diabetes who reside in the greater Washington, DC, metropolitan area recruited 40 people with diabetes using public service announcements. The certified diabetes educator provided basic foot care education including instruction in self-inspection, skin care, and footwear selection. The patients' footwear was thoroughly examined for fit and appropriateness by the collaborating certified pedorthist. The certified pedorthist also examined the patients' feet to further evaluate deformities and pressure areas and looked for gait deviations and associated foot problems. The pedorthist checked the patients' current footwear and determined what type of shoe they would need if the situation required it. Results: 50% of the females and 37% of the males were not using footwear appropriate for their lower-extremity risk category. After seeing both the certified diabetes educator and the certified pedorthist, 33% of the patients purchased appropriate footwear appropriate for any manifested foot problems at various local shoe suppliers. Conclusions: The findings suggest that patients benefit when the certified diabetes educator and the certified pedorthist collaborate regarding a patient's foot care.	Hendricks, L.E. & Hendricks, R. T. (2001). The certified diabetes educator and the pedorthist working together. <i>Diabetes Educator</i> , 27(6), 812-8.
Grey Literature		
17	The Alberta Learning Information Service is the provincial gateway that provides information for career planning, post-secondary education and training, educational funding, job search, labour market trends, and workplace issues.	Alberta Learning Information Service website:

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	Relevant pages accessed include: (2014a). Podiatrist Educational Requirements . The “Educational Requirements” section on this page describes the educational requirements for podiatrists and identifies the nine post-secondary schools in the US that offers Doctor of Podiatry Medicine degrees. (2014b). Podiatrist Certification Requirements . The “Legislation” and “Education” sections on this page describe the registration and certification requirements for podiatry in the province of Alberta.	http://alis.alberta.ca/index.html Accessed August 2014.
18	Health Force Ontario is the province’s strategy to identify and address Ontario’s health human resource needs. Relevant pages accessed include: (2014). Chiropractors and Podiatrists . The “Registration Requirements” section on this page describes the requirements for registration with the College of Chiropractors of Ontario for internationally-educated podiatrists and chiropractors in the province.	Health Force Ontario website: http://www.healthforceontario.ca/en/Home Accessed August 2014.
19	The New York State Education Department administers professional regulation in the state of New York through its Office of the Professions. Relevant pages accessed include: (2014a). Podiatric Ankle Surgery Privileges . The “Standard Ankle Surgery Requirements” and “Advanced Ankle Surgery Requirements” sections on this page describe the training and certification requirements for qualifying for podiatric ankle surgery privileges, effective February 17, 2014. (2014b). Frequently Asked Questions . The answer to the question “Am I required to engage in continuing podiatric education in order to register my license?” on this page describes the continuing education requirement for a podiatrist. (2014c). Education Law, Article 141, Podiatry . The “Requirements for a Professional License” section on this page describes the requirements to qualify for a license as a podiatrist.	New York State Education Department website: http://www.op.nysed.gov/ Accessed August 2014.
20	The Ontario Podiatric Medical Association serves podiatrists in Ontario by advocating to government and other stakeholders on behalf of the profession. Relevant pages accessed include: (2014). About OPMA . The section titled “Podiatry and Chiropody” on this page describes differences between podiatrists and chiropractors in Ontario.	Ontario Podiatric Medical Association website: http://www.opma.ca/ Accessed August 2014.
21	Purpose: This legislative document defines medical practices in the state of Wisconsin, including those of podiatry. Relevant Information: Education: “Podiatrist” means an individual possessing the degree of doctor of podiatric medicine or doctor of surgical chiropody or an equivalent degree as determined by the affiliated credentialing board and holding a license to practice podiatry or podiatric medicine and surgery granted by the affiliated credentialing board. Continuing Education: The affiliated credentialing board shall promulgate rules establishing requirements and procedures for licensees to complete continuing education programs or courses of study in order to qualify for renewal of a license granted under this subchapter. The rules shall require a licensee to complete at least 30 hours of continuing education programs or courses of study within each two-year period immediately preceding the renewal date. Profession Title: No person may practice podiatry, designate himself or herself as a podiatrist, use or assume the title “doctor of surgical chiropody”, “doctor of podiatry”, or “doctor of podiatric medicine”, or append to the person’s name the words or letters “doctor”, “Dr.”, “D.S.C.”, “D.P.M.”, “foot doctor”, “foot specialist”, or any other title, letters, or designation which represents or may tend to represent the person as a podiatrist unless the person is licensed under this subchapter. Registration and Licensing: The affiliated	Wisconsin Statutes. (2014). Chapter 448. Medical Practices Subchapter IV . Accessed August 2014.

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	<p>credentialing board shall grant a license as a podiatrist to a person who does all of the following: 1) submits an application for the license to the department on a form provided by the department; 2) pays the fee; 3) submits evidence satisfactory to the affiliated credentialing board that the applicant does not have an arrest or conviction record; 4) submits evidence satisfactory to the affiliated credentialing board of all of the following: a) that the applicant is a graduate of a school of podiatric medicine and surgery approved by the affiliated credentialing board and possesses a diploma from such school conferring the degree of doctor of podiatric medicine, or equivalent degree as determined by the affiliated credentialing board, unless the affiliated credentialing board waives these requirements; and b) that the applicant has completed two years of postgraduate training in a program approved by the affiliated credentialing board or one year of postgraduate training in a program approved by the affiliated credentialing board if the one-year postgraduate training was completed by June 1, 2010; and 5) passes an examination. The affiliated credentialing board may grant a limited license to an applicant for a license if the affiliated credentialing board finds that the applicant has not demonstrated adequate education, training, or performance on any past examination or in any past practice, and that, based upon considerations of public health and safety, the applicant does not qualify for full licensure. The affiliated credentialing board shall conduct or arrange for examinations for podiatrist licensure. Examinations shall consist of written or oral tests, or both, requiring an applicant to demonstrate minimum competency in subjects substantially related to the practice of podiatry.</p>	
22	<p>The College of Chiropodists of Ontario regulates and governs chiropodists and podiatrists in accordance with the <i>Chiropody Act</i>, 1991, the <i>Regulated Health Professions Act</i>, and the regulations and by-laws in the province of Ontario. Relevant pages accessed include: (2013). Requirements for Registration as a Chiropodist in the Province of Ontario. This page describes the registration requirements for general, academic, and educational certificates in chiropody.</p>	<p>College of Chiropodists of Ontario website: http://www.cocoo.on.ca/ Accessed August 2014.</p>
23	<p>The Michener Institute provides education and grants post-secondary diplomas and certificates to health science professionals. Relevant pages accessed include: (2013). Graduate Advanced Diploma of Health Sciences (Chiropody). The “How long does it take?” and “Admission Requirements” sections on this page describe the Graduate Advanced Diploma of Health Sciences (Chiropody) at the Michener Institute.</p>	<p>Michener Institute website: http://www.michener.ca/ Accessed August 2014.</p>
24	<p>Purpose: This report presented a competency assessment that Professional Examination Service conducted on behalf of the College of Chiropodists of Ontario, evaluating the College registrants’ current educational and practical preparation for practicing an expanded scope of practice for podiatry in the province of Ontario. Relevant Information: <i>Education and Training in Canada:</i> In Ontario, the chiropody program at George Brown was taken over by the Michener Institute around 1990. The Michener program includes seven semesters of study over a three-year span. It was originally a post-secondary program, and students were awarded a Diploma in Chiropody (or Podiatric Medicine, depending on the year of graduation). Beginning with 2007 admissions, it became a post-bachelor’s program, and the diploma awarded is a Graduate Advanced Diploma of Health Sciences (Chiropody). The Michener Institute’s curriculum includes courses specific to soft tissue surgery, “high-risk” foot care, legislation and management, inter-professional collaboration, and research methodology. The Université du Québec a Trois-Rivières (UQTR) is the only university in Quebec offering a degree in podiatry. The program was established in 2004 and based largely on the US podiatry programs. A Diploma of Collegial Studies or the equivalent is required for admission, along with basic science prerequisite courses. These are the same prerequisites that are required for admission to medicine and dentistry programs in Quebec. The UQTR program was designed</p>	<p>Muenzen, P. M. & Dionne, S. (2013). Final Report of the Competency Assessment Project. The College of Chiropodists of Ontario. Accessed August 2014.</p>

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	<p>to meet the standards of accreditation of the Council on Podiatric Medical Education (CPME). This is a program culminating in the Doctor of Podiatric Medicine (DPM) degree. The program incorporates clinical practice in a variety of settings including hospitals affiliated with the New York College of Podiatric Medicine. <u>Education and Training in the US</u>: There are nine accredited podiatric medical schools in the US. The schools must build specific educational competencies into their curricula in order to be accredited. These competencies were developed by the Council of Deans of the American Association of Colleges of Podiatric Medicine and approved by both the Council of Deans and the Council on Podiatric Medical Education. While a minimum of three years or 90 semester hours of undergraduate college credit at an accredited institution is required for admission, over 97% of the students who enter a school of podiatric medicine have a Bachelor's degree. All of the schools of podiatric medicine require undergraduate courses in biology, inorganic chemistry, organic chemistry, and physics. The course of instruction leading to the DPM degree is four years in length. The first two years are devoted to classroom instruction and laboratory work in the basic medical sciences, such as anatomy, physiology, microbiology, biochemistry, pharmacology, and pathology. During the third and fourth years, students concentrate on courses in the clinical sciences, gaining experience in clinics and accredited hospitals. Clinical courses include general diagnosis (i.e., history taking, physical examination, clinical laboratory procedures, diagnostic radiology), therapeutics (i.e., pharmacology, physical medicine, orthotics, prosthetics), anaesthesia, and surgery. After completing the four-year curriculum required by podiatric medical schools, a new podiatric physician is required to participate in residency training. Currently, most states require a minimum of two years of postgraduate residency training in an approved healthcare institution for licensure purposes. However, by 2015, all accredited residencies will be three years in duration, and the states are expected to adopt this as a requirement for practice over time. <u>Education and Training in the UK</u>: In the UK, the Health Care and Professions Council accredits 13 programs of podiatry/chiroprody. All 13 programs are three-year postsecondary programs resulting in the award of a Bachelor's degree. Podiatry in Australia was originally closely modelled on its British counterpart, and the introduction of a uniform three-year training program in the late 1960s established an educational equivalence that remains broadly extant. <u>Education and Training in the Australia</u>: The Queensland University of Technology (QUT) program is a four-year Bachelor's degree program. To practice as a podiatric surgeon in Australia, a podiatrist must have completed extensive, postgraduate medical and surgical training, which enables them to perform reconstructive surgery of the foot and ankle. Candidates must complete a fellowship training program with the Australian College of Podiatric Surgeons. Requirements for admission to this program include the completion of an accredited undergraduate degree in podiatry, a minimum of two years postgraduate podiatric clinical practice, and completion of an accredited Master's degree program in podiatric surgery, podiatric medicine, medical science, or public health. The fellowship program consists of lectures, case studies, a skills development course, clinical rotation, peer review activities, progressive development of preoperative, perioperative, and postoperative skills, mentoring, and research and preparation of publications. The first phase of training focuses on knowledge base development and is followed by a general surgical sciences exam. The second phase focuses on the acquisition and application of perioperative management skills and is followed by a Foot and Ankle Surgical Theory Exam. The third phase focuses on attaining competence in all aspects of surgery. In the US, this phase includes rearfoot and ankle surgery workshops and international preceptorship. Each phase is roughly one year in duration. <u>Education and Training in South Africa</u>: In South Africa, the podiatry program at the Technikon Witwatersrand is a three-year, post-secondary degree program. The now defunct Technikon Witwatersrand became what is the University of Johannesburg today. <u>Bridging Programs</u>: Temple University in Philadelphia designed a "Flexible</p>	

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	<p>DPM” program in the early 2000s for Ontario- and British-trained chiropodists to be awarded the DPM degree. The course was designed to accommodate chiropodists who were working full-time and could be completed in three to five years. While the program was never put into place, its design documents gaps identified at that time that required bridging. In addition, and more importantly, the format of the course (i.e., weekend courses in Canada plus clinical training and placements in the US, each of two and four weeks in duration) offer a potential model for a bridging process. Prior to admission to the program, students were to undergo a three-day assessment process addressing 14 course areas. A prepared syllabus, learning objectives, and a suggested reading list were provided for each course. Based on their performance on the examination, students could earn credit for up to seven courses: Histology, general anatomy, lower extremity anatomy, neuroscience, biochemistry, physiology, and medical microbiology and immunology. The other seven courses, for which students could not be awarded transfer credit, were: Pharmacology, pathology, foot and ankle radiology, pathomechanics, physical medicine and rehabilitation, podiatric surgical principles, and operating room principles. Two factors may have led to the decision not to launch the program: 1) the Michener Institute's program changed soon after the Flexible DPM program was to be launched; and 2) when the assessment and placement test was first offered, nobody signed up. However, in the mid- to late-2000s, Temple University accepted a number of Michener graduates into its DPM program through an advanced standing process. Temple University is no longer accepting students through this route. Michener graduates were awarded transfer credits for courses that were determined to be equivalent to courses at Temple University and admitted to Year Three of the four-year program. An applicant in 2008 reported receiving transfer credits for Michener courses in general anatomy, neuroscience, podiatric practice I, biomechanics, and research. The candidate was required to complete online courses in six areas prior to admission: Pharmacology, biochemistry, histology, immunology, pathology, and radiology. The candidate had taken some of these courses at Michener, but was not awarded transfer credits for them. The 2008 applicant interviewed for this report had to take two second year courses at Temple University (i.e., gerontology, principles of digital and metatarsal surgery) in addition to the standard third year courses during her first year at Temple University. Once admitted, courses taken at Temple University to “bridge” to the DPM were: For the third year, principles of first ray surgery, fundamentals of dermatology, introduction to internal medicine, traumatology, reconstructive surgery of the foot and leg, professional administration and development, community health, the law and podiatric medicine, cadaver surgery, and rotations in peripheral vascular disease, neurology, infectious disease, and general orthopaedics; and for the fourth year, clerkships and externships. <u>Regulation in Canada (Alberta and British Columbia)</u>: Applicants to the Alberta College of Podiatric Physicians must have graduated from a college of podiatric medicine in Canada or the US approved by the CPME and received the DPM degree. They must also have successfully completed all three levels of the American Podiatric Medicine Licensing Examination (AMPLE) sponsored by the National Board of Podiatric Medical Examination (NBPME) as well as a two-year residency accredited by the CPME. The standards for accreditation incorporate a set of competencies expected to be successfully acquired during the residency process. In British Columbia, the College of Podiatric Surgeons of British Columbia is the licensing body, and the registration requirements are similar to those described above for Alberta. Currently, only US-trained DPMS who have completed the required residency are registered to practice podiatry in Alberta and British Columbia. Post-licensure certification in podiatric surgery is offered by the American Board of Podiatric Surgeons (ABPS). Currently, candidates must complete a minimum of two years of residency training in a program approved by the CPME. One of the two years of training must be in a CPME-approved podiatric surgical residency. Candidates who attend a 24-month podiatric medicine and surgery program are eligible</p>	

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	only for Certification in Foot Surgery. Candidates who attend a 36-month podiatric medicine and surgery program are eligible for both Certification in Foot Surgery and Certification in Reconstructive Rearfoot/Ankle Surgery. Presumably the residency training requirement will expand to 36 months for all candidates, in keeping with recent changes in residency training accreditation requirements.	
25	<p>Purpose: This legislative document defines podiatrists and podiatry and describes their scope of practice in the state of South Carolina. Relevant Information: The terms “podiatry” or “podiatrist” and “chiropody” or “chiroprapist” have identical meanings. The Board of Podiatry Examiners was created to be composed of five members, appointed by the Governor with the advice and consent of the Senate, one of whom must be a lay member from the State at large, one of whom must be a podiatrist from the State at large who shall serve as chairman, and three of whom must be podiatrists. The Board of Podiatry Examiners may promulgate regulations to carry out this chapter including, but not limited to, regulations establishing continuing education requirements. It shall be unlawful for any person to profess to be a podiatrist or chiroprapist or to practice or assume the duties incident to podiatry or chiropody without first obtaining from the State Board of Podiatry Examiners a podiatry license. In addition to all licensing requirements provided for in this chapter, an applicant for licensure must have completed a one-year post-podiatric medical formal preceptorship or residency program approved by the American Association of Podiatric Physicians and Surgeons or the American Podiatric Medical Association. The board may issue limited licenses to podiatrists participating in approved preceptorship or residency programs. It is unlawful for any person to practice podiatric medicine in this State without obtaining first a license from the board. The board shall conduct an examination of any applicant who submits satisfactory evidence that he has: a) received four years of high school training; b) completed at least three years of pre-podiatry training at a recognized college; and c) received a diploma or certificate of graduation from a recognized college of podiatric medicine which has been accredited by the Council on Podiatric Medical Education. For the purposes of examination, the board shall use the National Board of Podiatry Examination and may use other written or oral examinations as the board considers necessary; however, a written examination administered by the board must be a nationally recognized examination or must be administered by at least one other state. A person licensed to practice podiatry must pay an annual renewal license fee which must be established in regulation by the board and annually must complete twelve hours of continuing medical education through a program approved by the South Carolina Board of Podiatry Examiners. This continuing education requirement takes effect and applies to licenses being renewed beginning in 1997.</p>	<p>South Carolina Code of Laws. (2013). Title 40 – Professions and Occupations. Chapter 51. Podiatrists and Podiatry. Accessed August 2014.</p>
26	<p>Purpose: This guide describes qualifications required for internationally-trained immigrants to practice podiatry in the province of British Columbia. Relevant Information: The College of Podiatric Surgeons of British Columbia regulates the practice of podiatry in British Columbia by setting education and competency requirements, practice guidelines and standards of practice, and by monitoring and enforcing these requirements and standards. Licensing and registration with the College of Podiatric Surgeons of British Columbia is required in order to legally practice as a podiatrist in the province. The postgraduate Doctor of Podiatric Medicine degree is required in order to practice podiatry and use the designation Doctor of Podiatric Medicine. A medical residency is also required.</p>	<p>British Columbia Government. (2012). Podiatrists. Accessed August 2014.</p>
27	<p>Purpose: This briefing provides a general overview of the various interprofessional primary care team models, including podiatrists and/or chiroprapists, currently used in Canada. Relevant Information: Family health teams in Ontario include podiatrists or chiroprapists as well as physicians, nurse practitioners and other nurses, pharmacists, registered dietitians, social workers or mental health workers, health educators, and occupational therapists. Community health centres in Ontario employ chiroprapists as well as</p>	<p>Conference Board of Canada. (2012). Improving Primary Health Care through Collaboration. Briefing 1 –</p>

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	physicians, nurse practitioners and other nurses, dietitians, speech pathologists, audiologists, social workers, health promoters, and community health workers.	Current Knowledge about Interprofessional Teams in Canada . Accessed August 2014.
28	Purpose: This paper summarizes the evidence relating to the clinical impact of foot care for people with diabetes in the UK. Relevant Information: A number of studies present evidence that multidisciplinary diabetic foot care teams (MDTs) can reduce the rate of amputations. For example, an open-access foot care clinic in Torbay was established in 2006 with a MDT comprising weekly input from a diabetologist, two podiatrists, and an orthotist, fortnightly input from a vascular surgeon and an orthopaedic surgeon, and support from tissue viability nurses, microbiologists, diabetes liaison nurses and radiologists as required. Between 2006 and 2009 the service reported (in unpublished data) that the major amputation rate for diabetic patients fell from 314.7 to 101.5 per 100,000 people with diabetes. Care is needed, however, in comparing study results as the composition and function of such teams varies. Some teams, for example, focus only on hospital-based care while others include outreach services and community-based early intervention services.	Kerr, M. (2012). Foot Care for People with Diabetes. The Economic Case for Change . Accessed August 2014.
29	The Canadian Information Centre for International Credentials provides information about foreign credential recognition and the assessment of diplomas and qualifications in Canada. (2011). Information for Foreign-Trained Podiatrists and Chiropodists . The “Information on requirements to practice” and “List of regulatory bodies” sections describe the requirements for podiatrists to practice in Canada and list the provincial regulatory bodies, respectively.	Canadian Information Centre for International Credentials website: http://cicic.ca/ Accessed August 2014.
30	Purpose: This overview describes the steps to getting a license as a podiatrist for internationally-educated health professionals in the province of Saskatchewan. Relevant Information: The regulatory body for podiatrists in Saskatchewan is the Saskatchewan College of Podiatrists (SCOP). For internationally-educated health professionals, SCOP will assess their educational and work background and advise them on whether they are eligible to write the provincial entrance exams. SCOP recognizes podiatry educational programs from the US, the UK, Australia, New Zealand, and South Africa. Applicants must submit to SCOP: 1) a completed application for registration form; 2) a photocopy of all podiatry/chiropody medicine transcripts, sent directly from their educational program to SCOP; 3) copy of an educational certificate or diploma from their podiatry program; 4) proof of their good standing as a podiatrist from all the licensing bodies with which they were previously registered as a podiatrist; 5) a copy of their current podiatry license; 6) two letters of reference from two regulated health professionals providing proof of their good character; 7) a completed criminal record check; 8) certified translations of any documents not originally written in English or French; and 9) all required fees. If the Registrar decides that they are not yet eligible to write the provincial entrance exams, they may be asked to complete some additional training. They may be required to take some clinical training or complete some academic courses. If the Registrar has declared that they are eligible to write the provincial entrance exams, they must successfully complete the exams before they can receive their license. There are two exams – written and clinical. If the applicants do not meet all of the requirements for licensing, they may be given a Restricted Practice License. This license allows them to practice as a podiatrist with some restrictions as they work to meet all of the requirements for a General Practice License. They can only be granted a Restricted Practice License for a limited period of time before they must meet the requirements for a General Practice License.	Saskatchewan Immigration. (2011). Internationally Educated Health Professionals. Steps to Licensing Podiatrists . Accessed August 2014.

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31	<p>Purpose: This <i>Health Professions Act</i> defines podiatric medicine and its scope of practice in the province of British Columbia.</p> <p>Relevant Information: “College of Podiatric Surgeons of British Columbia” is the name of the college established under the <i>Health Professions Act</i> for podiatric medicine.</p>	<p>British Columbia Regulation. (2010). Health Professions Act. Podiatrists Regulation. Accessed August 2014.</p>
32	<p>Purpose: This report provides background information to support the development of guidelines for the integration of internationally educated health professionals into the workplace in the province of Ontario. Relevant Information: The Ontario association for chiropractors is called the College of Chiropractors of Ontario. Specific requirements for chiropractors to enter to practice include: 1) successful completion of a post-secondary program approved by the Council of the College of Chiropractors of Ontario; 2) successful completion of a registration exam; and 3) engagement in clinical practice for at least three months during the two years immediately preceding the date of the application.</p>	<p>Baumann, A., & Blythe, J. (2009). Integrating Internationally Educated Health Care Professionals into the Ontario Workforce. Ontario Hospital Association. Accessed August 2014.</p>
33	<p>Purpose: This legal document describes the regulation and continuing education requirements for the licensing of podiatrists in the state of Kansas. Relevant Information: <u>Title Protection:</u> It shall be unlawful for any person to profess to be a podiatrist, to practice or assume the duties incidental to podiatry, to advertise or hold oneself out to the public as a podiatrist, or to use any sign or advertisement with the word or words “podiatrist”, “foot specialist”, “foot correctionist”, “foot expert”, “practapedist”, “chiropracist”, or any other term or terms indicating that such person is a podiatrist or that such person practices or holds oneself out as practicing podiatry or foot correction in any manner, without first obtaining from the board a license authorizing the practice of podiatry in this state, except as hereinafter provided. <u>Registration and Licensing:</u> Examinations for a license to practice podiatry in this state shall be held at the same time and place as the examinations held by the board under the <i>Kansas Healing Arts Act</i>. All applicants for a license to practice podiatry under the provisions of this Act: 1) shall have attained the age of 21 years; 2) shall have completed at least four years of instruction in, and be graduates of, a school of podiatry which is recognized as being in good standing by the board; and 3) commencing with applicants for a license to be granted on or after July 1, 1988, shall have completed acceptable postgraduate study as may be established by the board by rules and regulations. Applicants licensed, registered or certified by a board of examiners of any other state or country whose requirements for licensure, registration, or certification are substantially equal to those of this state in the opinion of the Kansas State Board of Healing Arts may be granted, upon payment of the endorsement license fee established, and amendments thereto, a license without examination. Each applicant for a license to practice podiatry shall be examined by the board in the following subjects: Anatomy, bacteriology, chemistry, dermatology, histology, pathology, physiology, pharmacology and medicine, diagnosis, therapeutics, and clinical podiatry and surgery, limited in their scope to the treatment of the human foot. <u>Continuing Education:</u> Every licensed podiatrist in the active practice of podiatry within Kansas, in order to comply with the provisions of this section, shall complete such hours of continuing education as may be required by the board by rules and regulations. The following categories of continuing education programs shall count toward satisfying the hourly requirement: 1) programs offered by colleges of podiatry; 2) veterans administration programs; 3) American podiatry association programs; 4) state podiatry association programs; 5) seminars sponsored by recognized specialty groups of the American podiatry association; and 6) the activities of persons publishing papers, presenting clinics, lecturing and teaching shall be granted ten credit hours for each hour of original presentation and hour-for-hour credit for additional presentations of the same material.</p>	<p>Kansas Statutes. (2009). Regulation of Podiatrists. Accessed August 2014.</p>

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34	<p>Purpose: This submission by the Ontario Podiatric Medical Association (OPMA) makes several comments on interprofessional collaboration among health colleges and professionals for Ontario’s Health Professions Regulatory Advisory Council’s consideration.</p> <p>Relevant Information: According to the OPMA, podiatry is both pleased and honoured not to have gone through the Ontario Health Insurance Plan (OHIP) delisting process experienced by other “allied” health care professions, namely chiropractic, optometry, and physiotherapy. The OPMA noted that being able to bill OHIP does constitute a clear benefit to patients and a competitive advantage, but it also makes working with other professions more difficult. For example, any podiatrist would think twice about referring a patient to a health care practitioner where the patient would have to pay out of his or her own pocket. According to the OPMA, archaic OHIP rules, such as the podiatrist having to personally deliver the services billed to OHIP, also detract from interprofessional collaboration. Insurance companies have been known to discourage referrals to podiatrists because of legislative barriers against co-billing. In short, differences in funding models create delivery silos that constitute huge barriers to interprofessional coordination.</p>	<p>Ontario Podiatric Medical Association. (2008). Submission to HPRAC on Interprofessional Collaboration among Health Colleges and Professionals. Accessed August, 2014.</p>
35	<p>Purpose: This report describes the registration practices of regulated professions including those of podiatry in the province of Ontario. Relevant Information: Ontario’s practice of registering chiropodists, but not podiatrists, makes it unique in North America. A person with a doctor of podiatric medicine (DPM) degree who is trained as a podiatrist may currently register in Ontario but only as a chiropodist and is allowed to perform only the acts of a chiropodist authorized by the 1991 <i>Chiropody Act</i>. In Quebec, parts of western Canada, and most of the US, the regulated profession is podiatry. Academic programs in the US offer programs in podiatry, not chiropody. To begin the application process for becoming registered as a chiropodist in Ontario, applicants must do the following: 1) submit completed application documents to the College of Chiropodists of Ontario (COCOO); 2) pay a \$50 application fee; 3) successfully complete a chiropody/podiatry program from an approved institution; 4) successfully complete the COCOO Registration Examination set or approved by the college’s council; 5) have completed three months of approved professional experience within the two years immediately preceding the date of the application; and 6) obtain Canadian citizenship or permanent resident status or be authorized under the <i>Immigration and Refugee Protection Act</i> to practice the profession in Canada. The registration regulation for the COCOO sets out three categories of registration certificates: General, Academic, and Educational. <u>General Certificate of Registration:</u> A General certificate of registration permits the registrant, subject to any terms, conditions and limitations, to practice as a chiropodist under the 1991 <i>Chiropody Act</i>. The following are the requirements for a general certificate of registration: 1) the applicant must have successfully completed an approved post-secondary program whose curriculum includes courses in health sciences, chiropodial sciences, humanities and clinical education that are relevant to the scope of practice of the profession; 2) the applicant must have successfully completed the required Registration Examination set or approved by Council; 3) the applicant must have engaged in clinical practice for a total of at least three months during the two years immediately preceding the date of the application; 4) if the Registration Committee decides that the program the applicant has completed is deficient in one or more aspects, the applicant must give a written undertaking to the college to abide by any terms, conditions and limitations imposed by the committee on his or her certificate of registration until the applicant meets the educational requirements set by the committee; and 5) the applicant must be a Canadian citizen or a permanent resident of Canada or be authorized under the Immigration and Refugee Protection Act to practice the profession in Canada. <u>Academic Certificate of Registration:</u> An Academic certificate of registration may be granted to an applicant in the following circumstances: 1) the applicant must have successfully completed an approved post-secondary program whose curriculum includes courses in health sciences, chiropodial science, humanities, and clinical education</p>	<p>Office of the Fairness Commissioner. (2007). Study of Registration Practices of the College of Chiropodists of Ontario, 2007. Accessed August 2014.</p>

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	<p>that are relevant to the scope of practice of the profession; 2) the applicant must have an appointment to the faculty of a post-secondary program in Ontario that meets the standards described above; 3) if the Registration Committee decides that the program the applicant has completed is deficient in one or more aspects, the applicant must give a written undertaking to the college to abide by any terms, conditions and limitations imposed by the committee on his or her certificate of registration until the applicant meets the educational requirements set by the committee; and 4) the applicant must be a Canadian citizen or a permanent resident of Canada or be authorized under the <i>Immigration and Refugee Protection Act</i> to accept the appointment described in paragraph 2. <u>Educational Certificate of Registration</u>: An Educational certificate of registration may be granted to an applicant who is either: 1) enrolled in Ontario in an approved post-secondary program whose curriculum includes courses in health sciences, chiropodial sciences, humanities and clinical education that are relevant to the scope of practice of the profession; or 2) engaged in practice under the supervision of a member who holds a General or Academic certificate of registration in order to meet requirements imposed by the Registration Committee for qualification for a General certificate of registration.</p>	
36	<p>Purpose: This legal document describes the rules and regulations for the licensing of podiatrists in the state of Rhode Island. Relevant Information: <u>Continuing Education:</u> Every podiatrist licensed to practice podiatry in this state under the provisions of the Act (i.e., Chapter 5-29 of the General Laws of Rhode Island, as amended, entitled "Podiatrists") and the regulations herein, shall on or before the 30th of September of each year, have satisfactorily completed a minimum of fifteen continuing medical education credits as approved by the Board of Examiners in Podiatry. Such approval shall be based on the Standards, Requirements, and Guidelines for Approval of Continuing Education in Podiatric Medicine of the Council on Podiatric Medical Education of the American Podiatry Medical Association. <u>Regulation:</u> No person granted a license under the statutory and regulatory provisions herein, shall display or use the title "doctor" or its synonym without the designation of "chiropracist" or "podiatrist" and shall not mislead the public as to the limited professional qualification to treat human ailments. An applicant seeking licensure to practice podiatry must: 1) have attained the age of eighteen years of age or older; 2) be of good moral character; 3) have completed a satisfactory course of at least three years of study in a duly recognized college or university; 4) provide evidence of satisfactory completion of a course of study in podiatric medicine approved and accredited by the Council on Podiatric Medical Education of the American Podiatric Medical Association (The degree of doctor of podiatric medicine shall be conferred upon the applicant from the same college as was his/her course of study); 5) have satisfactorily completed a one-year residency in Podiatric Medicine as defined, recognized and accredited by the Council on Podiatric Medical Education of the American Podiatric Medical Association (Said program must also have been accredited by the aforementioned body at the time of residency participation); 6) have satisfactorily passed the National Board of Podiatric Examination and the Podiatric Medical Licensing Examination for States (PM LEXIS Examination); and 7) meet such other requirements as set forth by regulation or as may be established by the Board. Applicants shall be required to pass an examination to test the applicants' knowledge and skills to practice podiatry in this state, pursuant to the statutory and regulatory provisions herein. For written examination, the Board requires the applicants to successfully pass the National Board of Podiatric Examination and the PM LEXIS Examination, which can be taken upon satisfactory completion of the didactic requirements herein.</p>	<p>Rhode Island Department of Health. (2007). Rules and Regulations for the Licensing of Podiatrists. Accessed August 2014.</p>
37	<p>Purpose: This legal document describes the rules and regulations for the registering and licensing of podiatrists in the province of Saskatchewan. Relevant Information: The council of the Saskatchewan College of Podiatrists may register as a member, and issue a license to practice to, a person who produces evidence establishing to the satisfaction of the council that the person: 1) has paid</p>	<p>Saskatchewan Statutes. (2007). Podiatry Act. Accessed August 2014.</p>

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	the prescribed fees; 2) has complied with the bylaws with respect to registration as a member; 3) has successfully completed a podiatry education program that is prescribed in the bylaws; and 4) has successfully passed the examinations prescribed or recognized by the council pursuant to the bylaws. Notwithstanding the above, the council may register as a member, and issue a license to practice to, a person who produces evidence establishing to the satisfaction of the council that the person: 1) has paid the prescribed fees; 2) has complied with the bylaws with respect to registration as a member; and 3) is registered as the equivalent of a podiatrist in good standing pursuant to the legislation of another jurisdiction in Canada.	
38	The Australian Podiatry Association of Victoria is an independent, member organization serving both the profession and the community in Victoria, Australia. Relevant pages accessed include: (2002). Education and Regulation . This page describes the “education and registration” for podiatrists in Victoria, Australia.	Australian Podiatry Association of Victoria website: http://www.podiatryvic.com.au/ Accessed August 2014.
39	Purpose: This submission prepared by the Australian Podiatry Association of Victoria and the Podiatrists Registration Board of Victoria concerns the extension of prescribing rights for podiatrists. Relevant Information: Regulation: The Podiatrists Registration Board regulates the practice of podiatry in Victoria. The Board approves courses that provide the qualifications (both undergraduate and postgraduate) for the registration of podiatrists and serves to protect the public interest.	Australian Podiatry Association. (2002). Podiatry Best Practice – Extension of Access to Schedule 4 Drugs . Accessed August 2014.
40	Purpose: This legal document describes the rules and regulations for the registering and licensing of podiatrists in the province of Manitoba. Relevant Information: Regulation: No person except a podiatrist shall use the title “podiatrist” or “chiropractist”, a variation or abbreviation of that title, or an equivalent in another language. A podiatrist registered under this <i>Act</i> may display or make use of the title “Doctor” or the abbreviation “Dr.”, provided it is used in connection with the word “podiatrist”, clearly indicating that he or she is not a physician within the meaning of the <i>Medical Act</i> . The registrar shall approve an application for registration as a podiatrist if the applicant: 1) meets the competency requirements approved by the council; 2) establishes that his or her name has not been removed for cause from a register of persons authorized to engage in the practice of podiatry in Canada or elsewhere; 3) establishes that he or she has not been suspended as a result of professional misconduct by a regulatory authority governing the practice of podiatry in Canada or elsewhere; 4) pays the fees provided for in the by-laws; and 5) meets any other requirements set out in the regulations.	Manitoba Laws. (2001). Podiatrists Act . Accessed August 2014.
41	Purpose: This primer for policymakers describes the education and training of Doctors of Podiatric Medicine (DPMs) in the US. Relevant Information: The podiatric medical curriculum integrates basic science education with clinical education specific to lower extremity anatomy. The first two years of podiatric medical education parallel those of medical students – podiatric medical students receive extensive instruction which includes anatomy, biochemistry, pathology, and pharmacology. During the third- and fourth-year clinical rotations, podiatric medical students learn how to perform general and podiatric physical examinations, interpret test results, make diagnoses, and perform therapeutic procedures, including surgery, in accredited hospitals, clinics, and private practice settings. After graduating from a podiatric medical school, podiatric medical doctors enroll in one of approximately 211 health care institutions that are approved sponsors of podiatric medical residency programs. The residency program provides training resources that facilitate the resident’s sequential and progressive achievement of demonstrated competency in medical and surgical management. During residency programs, podiatrists receive advanced training in podiatric medicine and surgery and take part in clinical rotations in anaesthesiology, internal medicine, pathology, radiology, emergency medicine, and orthopaedic and general surgery with a major	American Podiatric Medical Association. (n.d.). Podiatric Medicine: A Primer for Policymakers . Accessed August 2014.

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	emphasis placed on patient diagnosis and management in both inpatient and outpatient settings. Unlike orthopaedic residency training that does not universally require a commitment to foot and ankle medical and surgical management, podiatric residency programs must meet minimum requirements for training that includes hundreds of patient diagnoses, foot and ankle procedures, and care management.	
42	The Canadian Podiatric Medical Association is a non-profit organization working on behalf of Canada's foot specialists. Relevant pages accessed include: (n.d.). FAQs . The sections titled "What education and training are required to become a podiatrist?" and "Where can I receive training to become a podiatrist?" on this page describe the education and training requirements for podiatrists and identify schools in Canada, the US, and the UK for receiving the education and training, respectively.	Canadian Podiatric Medical Association website: http://www.podiatrycanada.org/ Accessed August 2014.
43	The College of Podiatry is a registered charity with the aim to benefit the public through the work of its podiatrist members with activities that include education, research, scientific annual conferences, and foot care promotion. Relevant pages accessed include: (n.d.). Find out about Podiatric Surgeons . This page describes podiatric surgery education and training in the UK.	College of Podiatry website: http://www.scpod.org/ Accessed August 2014.
44	Purpose: This legal document describes the professional and occupational licensing, certification, title protection and registration, and examination for podiatry in the state of Connecticut. Relevant Information: Regulation: No person granted a certificate under this chapter shall display or use the title "Doctor" or its synonym without the designation "Podiatrist" or "Podiatric Medicine" and shall not mislead the public as to the limited professional scope of practice to treat human ailments. A podiatrist has received a diploma or other certificate of graduation from an accredited school or college of chiropody or podiatry approved by the Board of Examiners in Podiatry with the consent of the Commissioner of Public Health and has obtained a license from the Department of Public Health after meeting the requirements of this chapter. A graduate of an approved school of chiropody or podiatry subsequent to July 1, 1947, shall present satisfactory evidence that he or she has been a resident student through not less than four graded courses of not less than thirty-two weeks each in such approved school and has received the degree of Doctor of Surgical Chiropody or Doctor of Podiatry or other equivalent degree; and, if a graduate of an approved chiropody or podiatry school subsequent to July 1, 1951, that he or she has completed, before beginning the study of podiatry, a course of study of an academic year of not less than thirty-two weeks in duration in a college or scientific school approved by said board with the consent of the Commissioner of Public Health, which course included the study of chemistry and physics or biology; and if a graduate of an approved college of podiatry or podiatric medicine subsequent to July 1, 1971, that he or she has completed a course of study of two such prepodiatry college years, including the study of chemistry, physics or mathematics and biology, and that he or she received the degree of Doctor of Podiatric Medicine. The Department of Public Health may issue a permit to independently engage in standard ankle surgery procedures to any licensed podiatrist who: 1A) graduated on or after June 1, 2006, from a three-year residency program in podiatric medicine and surgery that was accredited by the Council on Podiatric Medical Education, or its successor organization, at the time of graduation; and 1B) holds and maintains current board certification in reconstructive rearfoot ankle surgery by the American Board of Podiatric Surgery, or its successor organization; or 2A) graduated on or after June 1, 2006, from a three-year residency program in podiatric medicine and surgery that was accredited by the Council on Podiatric Medical Education, or its successor organization, at the time of graduation; 2B) is board qualified, but not board certified, in reconstructive rearfoot ankle surgery by the American Board of Podiatric Surgery, or	Connecticut Statutes. (n.d.). Chapter 375. Podiatry . Accessed August 2014.

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	<p>its successor organization; and 2C) provides documentation satisfactory to the department that such licensed podiatrist has completed acceptable training and experience in standard or advanced midfoot, rearfoot, and ankle procedures; or 3A) graduated before June 1, 2006, from a residency program in podiatric medicine and surgery that was at least two years in length and was accredited by the Council on Podiatric Medical Education at the time of graduation; 3B) holds and maintains current board certification in reconstructive rearfoot ankle surgery by the American Board of Podiatric Surgery, or its successor organization; and 3C) provides documentation satisfactory to the department that such licensed podiatrist has completed acceptable training and experience in standard or advanced midfoot, rearfoot and ankle procedures; except that a licensed podiatrist who meets the qualifications of subdivision 2) of this subsection may not perform tibial and fibular osteotomies until such licensed podiatrist holds and maintains current board certification in reconstructive rearfoot ankle surgery by the American Board of Podiatric Medicine, or its successor organization. For purposes of this subsection, “standard ankle surgery procedures” includes soft tissue and osseous procedures. The Department of Public Health may issue a permit to independently engage in advanced ankle surgery procedures to any licensed podiatrist who has obtained a permit or who meets the qualifications necessary to obtain a permit, provided such licensed podiatrist: 1A) graduated on or after June 1, 2006, from a three-year residency program in podiatric medicine and surgery that was accredited by the Council on Podiatric Medical Education, or its successor organization, at the time of graduation; 1B) holds and maintains current board certification in reconstructive rearfoot ankle surgery by the American Board of Podiatric Surgery, or its successor organization; and 1C) provides documentation satisfactory to the department that such licensed podiatrist has completed acceptable training and experience in advanced midfoot, rearfoot and ankle procedures; or 2A) graduated before June 1, 2006, from a residency program in podiatric medicine and surgery that was at least two years in duration and was accredited by the Council on Podiatric Medical Education at the time of graduation; 2B) holds and maintains current board certification in reconstructive rearfoot ankle surgery by the American Board of Podiatric Surgery, or its successor organization, and 2C) provides documentation satisfactory to the department that such licensed podiatrist has completed acceptable training and experience in advanced midfoot, rearfoot, and ankle procedures. For purposes of this subsection, “advanced ankle surgery procedures” includes ankle fracture fixation, ankle fusion, ankle arthroscopy, insertion or removal of external fixation pins into or from the tibial diaphysis at or below the level of the myotendinous junction of the triceps surae, and insertion and removal of retrograde tibiototalcaneal intramedullary rods and locking screws up to the level of the myotendinous junction of the triceps surae, but does not include the surgical treatment of complications within the tibial diaphysis related to the use of such external fixation pins. The Department of Public Health shall hold examinations under the supervision of the board at least once each year and on such other days and at such time and place as the department may designate.</p>	
45	<p>Purpose: This legal document describes the regulation for podiatrists in the State of Georgia. Relevant Information: “Board” means the State Board of Podiatry Examiners. A license to practice podiatric medicine shall be issued to any person who: 1) is a graduate of an accredited college of podiatric medicine approved by the board; 2) holds a Doctor of Podiatric Medicine degree or its equivalent; 3) satisfactorily passes a board approved examination, if an examination is required by the board; 4) successfully completes postgraduate training of no less than 12 months as a resident in podiatric medicine and surgery in a program or institution approved by, and in good standing with, the board; 5) has attained the age of 21 years; 6) is not disqualified to receive a license under the provisions of Code Section 43-35-16; and 7) pays the required fee to the board.</p>	<p>Georgia Statutes. (n.d.). Georgia Podiatry Practice Act. Accessed August 2014.</p>

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46	<p>The Podiatrists Board of New Zealand ensures that podiatrists are safe and competent to practice. Relevant pages accessed include: (n.d.). Welcome to the Website of the Podiatrists Board of New Zealand. This page describes the Podiatrists Board of New Zealand as the regulatory body for the occupation of podiatry and chiropody in New Zealand.</p>	<p>Podiatrists Board of New Zealand website: http://www.podiatristsboard.org.nz/ Accessed August 2014.</p>
47	<p>Purpose: This legal document describes the <i>Podiatry Practice Act</i> including the license required to practice and applications for licenses in the state of Wyoming. Relevant Information: <u>Regulation:</u> It is unlawful for a person to profess to be a podiatrist, to practice or assume the duties incident to podiatry, or to advertise in any form or hold himself out to the public as a podiatrist, or in a sign or advertisement to use the word “podiatrist”, “foot correctionist”, “foot expert”, “foot specialist”, “chiropodist” or any other term or designation indicating to the public that he is holding himself out as a podiatrist or foot correctionist in any manner, without first obtaining from the board a license authorizing the practice of podiatry in this state under the <i>Podiatry Practice Act</i>. Persons who wish to practice podiatry in this state shall make application on a form authorized and furnished by the board for a license to practice podiatry. <u>Education and Training:</u> This application shall be granted to an applicant after he or she has furnished satisfactory proof that he or she has satisfactorily completed two years in a recognized college of liberal arts or of the sciences and that he or she is a graduate of a regularly established school of podiatry recognized by the American Podiatric Medical Association or its successor and the board which requires as a prerequisite to graduation the completion of at least 3,360 scholastic hours of classroom work. A school of podiatry shall not be accredited by the board if it does not require for graduation at least four years of instruction in the study of podiatry. Every applicant for a license to practice podiatry shall have successfully completed a residency approved by the board through rules and regulations. This requirement applies only to applicants who graduate from podiatric college after July 1, 2005. After the application has been accepted by the board, together with the payment of the license fee, the applicant must pass a satisfactory examination as prepared under the rules and regulations of the board. The examinations shall embrace the subjects of histology, surgery, hygiene, dermatology, anatomy, physiology, chemistry, bacteriology, pathology, diagnosis and treatment, pharmacology, therapeutics, clinical podiatry, and such other subjects as the board may prescribe, a knowledge of which is commonly and generally required by the practitioners of podiatry. This section shall not be construed to require of the applicant a medical or surgical education.</p>	<p>Wyoming Statutes. (n.d.). Board of Registration in Podiatry Practice Act. Accessed August 2014.</p>



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